

Critical Thinking Skills for Little Thinkers

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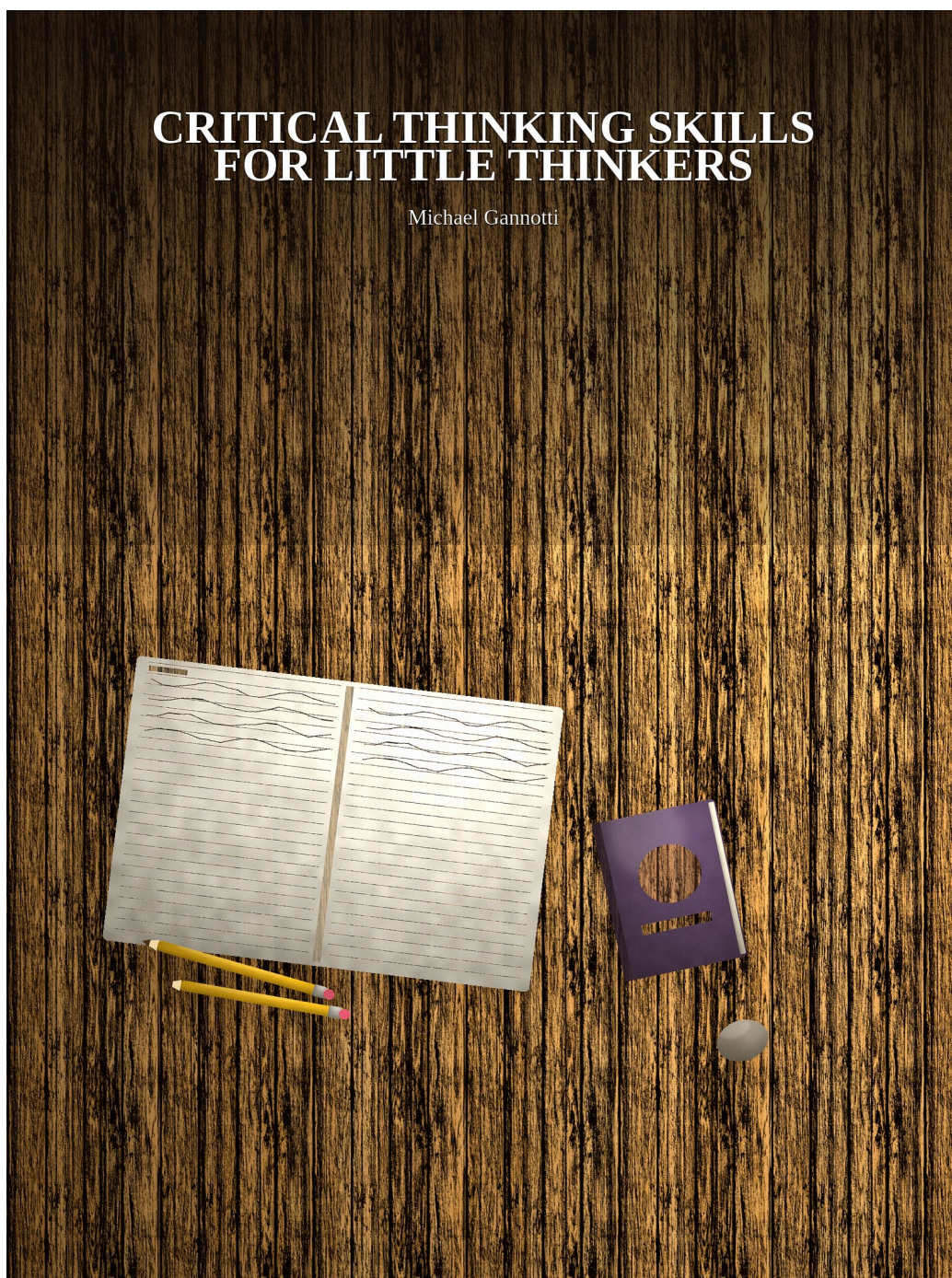


Figure 1: Cover

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This illustrated edition is the teaching-manual of 1 September 2026. Endnotes run in one series. Chapter-opening images are original still-lives, not portraits of persons or children. Documents still constrain the facts.

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Welcome

This book exists because the thinking hour at your table is the whole program. There is no philosophy department down the hall and no specialist waiting after lunch. There is you, a student, and today's move — something to look at, a question worth waiting for, a reason to hear, one other thing to check. That is enough, if you know what to do with the hour.

I wrote this for a capable, busy, willing parent. You may be teaching two ages at once, five-to-seven and eight-to-ten, at one table. You may be fitting a thinking sit between a job, a toddler, and a grocery run. You may love a good argument, or you may remember philosophy as a fog of names. Many adults feel rusty when they sit down to teach thinking. That feeling is common. It is not a verdict. We will move on from it. This book will make you fluent enough in today's move to hear a wish offered as a reason, and to ask a good question — without turning dinner into a courtroom.

You do not need to be a philosopher. You do need to hear “because I want it to be sunny” as a wish, not a look out the window. You need a session shape you can run on a Tuesday. You need a few sentences that actually help. That is the job. A path through ordinary challenges — turns, snacks, stories, weather, a friend's sentence about a shop — is possible at a kitchen table. The path is not a personality trait and it is not a percentile. It is a small set of moves, practiced on something the child already knows, with you in the chair.

About 3.4 percent of U.S. students ages 5–17 were homeschooled in 2022–23 — roughly 1.765 million children.¹ That figure is context, not a ranking. You are one

¹Ellena Sempeles and Jiashan Cui, *Parent and Family Involvement in Education: 2023*, NCES 2024-113 (Washington, DC: National Center for Education Statistics, September 2024), Table A-6: 3.4 percent homeschooled, approximately 1,765,000 students, ages 5–17 with a K–12 grade equivalent, 2022–23. <https://nces.ed.gov/pubs2024/2024113.pdf>. Access date for URLs in these notes:

of those tables. Many readers of this book will not be in that pond. They will be after-school, weekend, or kitchen-table parents of enrolled children. The moves still fit. Homeschooling is legal in all fifty states and the District of Columbia. The paperwork is not one load: Texas asks almost nothing of the state agency; New York asks for a written plan and regular reports.² There is no national homeschool diploma and no national critical-thinking credit.³ None of Texas, North Carolina, Pennsylvania, Virginia, or New York requires a critical-thinking course.⁴ The last federal tables that listed subjects taught at home had no row for critical thinking, philosophy, or logic. Thinking, if it happened, happened inside reading, science, or conversation.⁵ The hour in front of you is the work.

1 September 2026. Latest federal count this book uses; not a 2026 national total. A neighboring 5.2 percent received instruction at home (homeschooled or full-time virtual) and is a different bucket.

²Texas Education Agency, “Home Schooling,” <https://tea.texas.gov/families-and-students/finding-school-your-child/home-schooling>. New York State Education Department, “Home Instruction Questions and Answers,” <https://www.nysed.gov/nonpublic-schools/home-instruction-questions-and-answers>. Homeschooling is legal in all fifty states and D.C.; these two pages illustrate a light-process and a heavier-process pattern, not a national template. This book is not legal advice.

³Texas Education Agency, “Home Schooling”: “The State of Texas does not award a diploma to students that are home schooled.” New York State Education Department, “Home Instruction Questions and Answers”: a high school diploma “may only be awarded to a student enrolled in a registered secondary school.” North Carolina Division of Non-Public Education, “Home School Records Retention & Diplomas FAQs,” <https://www.doa.nc.gov/divisions/non-public-education/home-schools/faqs/records-retention-diplomas>: the State does not issue a diploma or a transcript; the home-school chief administrator does.

⁴Texas Education Agency, “Alternative Schooling,” restating *Leeper*: bona fide instruction using a written curriculum of reading, spelling, grammar, math, and a course in good citizenship. North Carolina Division of Non-Public Education, “Home School Requirements and Recommendations”: annual nationally standardized test in English grammar, reading, spelling, and mathematics. Pennsylvania 24 P.S. § 13-1327.1(c)(1): elementary shall include English, arithmetic, science, geography, history, civics, safety education, health and physiology, physical education, music, and art. Virginia Department of Education, “Home Instruction”: the parent writes a list of subjects; evidence of progress is a composite score, SAT/ACT/PSAT, or an evaluation letter. New York 8 NYCRR 100.10(e)(2)(i): grades 1–6 required subjects are arithmetic, reading, spelling, writing, English language, geography, United States history, science, health, music, visual arts, and physical education. None of these five opened maps names a critical-thinking course. The parent reads their own statute.

⁵Jiashan Cui and Rachel Hanson, *Homeschooling in the United States: Results from the 2012 and 2016 Parent and Family Involvement Survey*, NCES 2020-001 (Washington, DC: National Center for Education Statistics, 2019), Tables 8 and 9. The published subject lists include arithmetic, scientific inquiry or experiments, earth sciences, biology, chemistry or physics, computer science, reading, spelling, English or literature, art, music, social science, history, geography, for-

What a good thinking hour looks like

You sit down already knowing today's move. An object is on the table — a jar, a book, a window, a box. The child looks. Then they talk. You ask one good question — not “what is the vocabulary word?” but “how do you know?” Then you wait. Three seconds feels long. It is the work. If the reason is a wish, you hear it. Then you look at one other thing. The hour ends with one short task they do alone: a spoken sentence, a caption, a line that names what they used to think and what they think now. You stop talking sooner than feels polite. The child talks and looks. You hold the key. That is the hour. The next long piece of this front matter, *The Thinking Hour*, will teach it in full. Later chapters will not reinvent it.

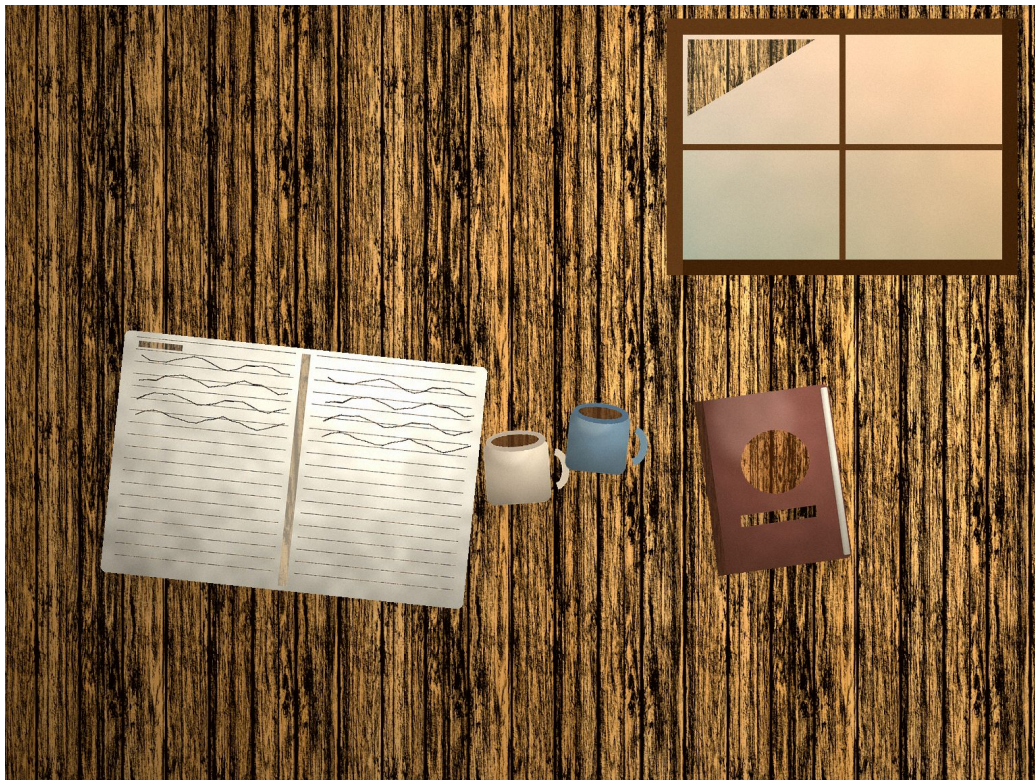


Figure 2: A kitchen-table thinking hour

eign language, physical education, and health. There is no row labelled critical thinking, philosophy, logic, or informal reasoning. The 2023 First Look did not republish the subject-taught tables. <https://nces.ed.gov/pubs2020/2020001.pdf>.

Little kids already think, in a domain they know. Critical thinking is not a bicycle you install at six.⁶ A child who says something false about weather, snacks, or a story is often applying a prior idea, not displaying an absence of thought. We practice the moves on the table in front of us. We do not wait for a readiness gate. We do not wait for a diploma.

Critical thinking, in the sentence this book keeps, is reasonable reflective thinking focused on deciding what to believe or do.⁷ A child deciding whether a leftover-snack claim is true and a child deciding whose turn it is are both inside that sentence. “Critical” here does not mean find the fault in people.

What you will actually get

Each teaching chapter does eight jobs, always in the same order, so you are never hunting for the move.

You will learn why this week’s idea is worth the struggle. You will understand it yourself, in plain language, with the wrong reasons you should be able to hear. You will get a session you can run this week: exact wording, named try-its in the home and outside it, and a talk box. Your student will get a short section of their own. If it isn’t clicking, you will get three diagnostics and a next move, with no shame in the room. Tools, including AI, stay optional and adult-side. And you

⁶Daniel T. Willingham, “Critical Thinking: Why Is It So Hard to Teach?,” *American Educator* 31, no. 2 (Summer 2007): people who have sought to teach critical thinking “have assumed that it is a skill, like riding a bicycle, and that, like other skills, once you learn it, you can apply it in any situation. Research from cognitive science shows that thinking is not that sort of skill.” Same essay: critical thinking “is a type of thought that even 3-year-olds can engage in—and even trained scientists can fail in.” https://www.aft.org/sites/default/files/media/2014/Crit_Thinking.pdf. National Research Council, *Taking Science to School: Learning and Teaching Science in Grades K–8*, ed. Richard A. Duschl, Heidi A. Schweingruber, and Andrew W. Shouse (Washington, DC: National Academies Press, 2007), Executive Summary: “The commonly held view that young children are concrete and simplistic thinkers is outmoded.” Used here for what children can already do, not to turn this into a science book.

⁷Robert H. Ennis, “What is critical thinking?,” last revised 26 November 2010, <https://criticalthinking.net/what-is-critical-thinking/>: “Critical thinking is reasonable reflective thinking focused on deciding what to believe or do.” Same sentence in Robert H. Ennis, *The Nature of Critical Thinking: Outlines of General Critical Thinking Dispositions and Abilities* (2013; last revised September 2015), <https://criticalthinking.net/wp-content/uploads/2024/04/The-Nature-of-Critical-Thinking.pdf>. Ennis: although “critical” is sometimes used in a negative sense, the concept presented here is not negative. The long outline “does not specify grade level.”

will get a plain checklist for “done enough,” so you can place by skill rather than by birthday.

The eight teaching chapters follow the work, not twelve thin grade labels: what we mean; the five moves; something to think about; picture books and stories; inside the home; outside the home; approaching disagreement; a life of the habit. Records and resources come last.

This week you can learn the session shape and today’s move well enough to hear a wish offered as a reason. Today the child can look at one object, say how they know, and change the sentence if the look goes the other way.

What this book will not do

This book will not hand you 180 days of worksheets. A year of photocopies is not a teaching method, and I will not pretend it is. Coverage is a map. Depth is the hour.

It will not treat a branded philosophy hour as a miracle. Conversation is worth ten minutes as conversation. A named school program is not a proven engine of generic critical thinking, and it was never measured that way at a kitchen table. Later, a short resources chapter names common programs by fit — parent load, style, how they place a student — so you can choose. Combining does not turn a brand into a course name. The transcript still says Reading or Science.

It will not franchise a thinking wheel as the science of little-kid thinking. A family may steal “what do you mean?” They may not treat a brand as a meta-analysis. It will not prepare a five-year-old for a college thinking inventory. Those sittings belong to older students. They are not the kitchen hour, and they are not a requirement.

It will not promise a score. There is no guaranteed percentile, no thinking diploma, and no certificate of thinking inside these pages. What this book can promise is a path: the moves, on something the child actually knows, until they can do the next one unaided.

It is not a sequel. *Critical Thinking for Life* is a different book, for a different age. One pointer, if you need it later: Chapter 6 of that book is “Leave the page,” and Chapter 8 is “When a machine finishes.” Then we teach at five to ten. *Autonomous*

AI and Education, *Science for Homeschooling*, and *Computer Science for All Ages* are other books. This one is the thinking hour at your table.

It is not a culture-war pamphlet. This book teaches *how to approach* disagreement. It does not rehearse live fights as content. We practice on turns, snacks, stories, weather, and a friend's sentence. Politics, religion, identity fights, war, and medical culture-war stay off this table. Method yes. Culture-war content no.

And this is not a book that lectures your child about you, or you about your character. The student is a person, not a percentile. When this book speaks to them, it speaks with respect. No baby-talk. No research sermon.

The promise

If you only remember one sentence, remember this: a path through ordinary challenges is the promise. A diploma is not.

The work is to take this child through thinking they can actually use — a snack claim, a turn on a swing, a story character who might be mistaken, grey sky versus the window — without skipping the look because they are “a good talker,” and without parking them in a workbook that is too easy because a catalog printed a grade on the cover. You will sometimes slow down. You will sometimes skip ahead. Both are teaching. Birthday is not placement.

Three things have to hold. You understand today's move well enough to hear a wish offered as a reason. The child talks and looks before the tool. Any helper — including an AI tool — stays on your side of the table: a supplement you host and constrain, not a thinking partner, not a secret friend, and not a substitute for the child's sentence or the look at one other thing.

You can do this. You do not have to know next year's move today. You have to know this week's move well enough to sit still while they struggle, then ask one good question. Start here. Read *How to Use This Book This Week*, then the one-page list of five things, then *The Thinking Hour*. After that, open the chapter that matches the skill in front of you. You will know more after one chapter than you know this morning. Your child will have something to try today. We can do this.

How to Use This Book This Week

Start at the skill in front of you, not on page one because a catalog, a birthday, or a well-meant relative said so.

This book is a handbook you open to this week's move, not a novel you read cover to cover. The teaching chapters run: what we mean; the five moves; something to think about; picture books and stories; inside the home; outside the home; approaching disagreement; a life of the habit. Records and resources come last. Age bands here are 5–7 and 8–10. They tell you the grain of the same moves. They do not tell you where *this* child sits.

This book does not replace the program already on the shelf. If a reading curriculum, a science path, a picture-book shelf, or a kitchen you already use is working, keep it. Use this book to hear a wish offered as a reason, to run the hour, and to name the work a stranger can read. Combine honestly. The title is still Reading or Science.

Two ages at one table

You may be teaching a five-to-seven-year-old and an eight-to-ten-year-old in the same sit. That is ordinary. The session shape in *The Thinking Hour* still holds; the object on the table and the grain of the question change.

The younger child talks. A drawing or a spoken sentence is enough. The check is near: the jar, the window, the next page, the door of the shop. The older child can hold a little more: a jacket, a park sign, a line that names the old view and the new one after a look. They are not two faculties. They are two grains of the same five moves. You may run a ten-minute snack sit with one child and a twenty-minute picture-book talk with the other. You do not need two personalities. You need two

first problems.

Pick the chapter by skill, not by birthday

Open the chapter you think is right. Skip to **What “done enough” looks like** at the end of the *previous* chapter, or to **If it isn’t clicking** in the one you opened. If the child can already do those checks unaided, you are too early. If the checks from two chapters back are still failing, drop back.

If they still live in naming a wish versus a look — if “because I want three” is the whole reason and the jar is still a surprise — they are still in the 5–7 band of the five-moves chapter, whatever their age. Young children already think in a domain they know. What they can do depends on what they have already been invited to look at, not on a birthday.⁸

If they cannot yet hold “what she thinks he thinks” in a known story, they are still in a first-order stage, whatever the birthday. An eight-year-old who still treats a fluent “because it’s fair” as a check is not “behind in philosophy.” They are still learning to leave the sentence and look.

If they can wait, ask what a word means, name a reason, and check one other thing, and they are still in a “grade 2 critical thinking workbook” only because the cover says so, skip ahead. Instruction for a six-year-old need not be “first grade”; it should match what the student actually needs and already knows.⁹ A publisher’s grade label is a scope, not a legal grade. Use this book’s checklists, then teach.

⁸National Research Council, *Taking Science to School: Learning and Teaching Science in Grades K–8*, ed. Richard A. Duschl, Heidi A. Schweingruber, and Andrew W. Shouse (Washington, DC: National Academies Press, 2007), Executive Summary: children entering school already have substantial knowledge of the natural world; “what is developmentally appropriate is not a simple function of age or grade, but rather is largely contingent on their prior opportunities to learn”; the view of the young child as a concrete, simplistic thinker is outmoded. Used here for what children can already do, not to turn this into a science book. Access date for URLs in these notes: 1 September 2026. <https://nap.nationalacademies.org/catalog/11625/taking-science-to-school-learning-and-teaching-science-in-grades>. Daniel T. Willingham, “Critical Thinking: Why Is It So Hard to Teach?,” *American Educator* 31, no. 2 (Summer 2007): even 3-year-olds can think in a known domain; thinking is not a bicycle skill.

⁹New York State Education Department, “Home Instruction Questions and Answers,” <https://www.nysed.gov/nonpublic-schools/home-instruction-questions-and-answers>: instruction for a six-year-old need not be “first grade”; “instruction should be geared to the level appropriate to the student’s needs and previous level of achievement.”

How you use the parent half

Most of each teaching chapter is for you. Read it *before* the lesson, not over the child's shoulder.

Why this matters tells you what this idea unlocks. **For the parent: understand it yourself** gives one everyday picture, one precise picture, and three to five wrong reasons you should be able to hear. Sit with those.

How to teach it this week assumes the session shape from *The Thinking Hour*. It will not rebuild the hour. It will give you this week's named try-its — at least one in the home and one outside it — the wording for *this* move, and a talk box: an exact opening question, three to five follow-ups, how to wait, and what a stuck silence usually means. Later chapters supply this week's questions. They do not reinvent the shape.

Practice that actually builds learning names the try-its with time, materials, safety, the fun, and the skill. The kitchen, the walk, the store, the park, and the library *are* the practice. **Tools, including AI** is optional, short, and for the adult. The rules live once in *The Thinking Hour*. **What “done enough” looks like** is how you leave: unaided work, not a perfect Tuesday.

You do not have to read the whole chapter tonight. You do have to read the parent half of *this week's* move before you sit down with the child.

The five-minute parent warm-up

Five minutes. Child not yet in the chair. Phone face down.

1. Read today's move until you can say it in one sentence.
2. Look at one object yourself. Ask, out loud, what would count as a check. Stay off any tool until you have looked.
3. Glance at the “wrong reasons you should be able to hear.” Name the one you would have given at fourteen.
4. Write one sentence you will actually say. Not a speech. Example: “How do you know?” Or: “What do you mean, *best*?”
5. Close the book to the student page. You are ready.

If you are learning the move *while* they are stuck, you will talk too much. Prepare first. Then sit still.

How the student uses “For the student”

Every teaching chapter includes a short section written to the student, not about them. One or two pages. Warmer. Direct. What the idea is, a tiny worked example, two tries, an “explain it back” prompt, and one challenge. Hand it over after your short model, not instead of it. You stay in the room. The challenge is optional that day.

The student page is not something to send off with an unsupervised chatbot. The attempt is still theirs. You still hold the key. “Critical” on that page does not mean find the fault in people.

In the home and outside it

Every teaching chapter names try-its at the table and try-its on a walk, at a store, in a park, or at the library. The furniture is already yours. The talk box travels. The live fight does not. If a real family disagreement is too hot for the table today, pick the swing, the box, or the shop.

When to skip ahead

Skip ahead when this chapter’s “done enough” checklist is already true *unaided*. Slow down when the same wish-as-reason repeats after a clear look. **If it isn’t clicking** will give you three likely causes and a next move. Hearing a wrong reason, then asking a better question, then naming a better reason if needed, is teaching.

For this week: pick the chapter by skill. Do the five-minute warm-up. Run the hour as *The Thinking Hour* describes it. Let the student page be theirs. Stop talking sooner than you want to.

If You Only Remember Five Things

Keep this page. The chapters will add wording, objects, and this week's questions. They will not replace these.

1. Kids already think in a domain they know. Critical thinking is deciding what to believe or do, with reasons, on something the child actually knows — a snack jar, a story, a window, a turn.¹⁰ It is not emptiness waiting for a kit. A child who says something false about weather is often applying a prior idea, not displaying an absence of thought. Start now, with ordinary life. Give them something they already somewhat know. You do not wait for a readiness gate.

2. Five moves, not a gym. Wait. What do you mean? How do you know? What else could be true? How could we check? That is the teachable object at five to ten. Thinking is not a bicycle you install at six and ride anywhere.¹¹ Name the move. Practice it next Tuesday on a similar case. One good question beats five. A skills poster without a thing on the table will not implement.

3. The child talks before the tool. You ask one good question and wait. Three seconds is a convention, not a sacrament.¹² The silence is the work. After they

¹⁰Robert H. Ennis, "What is critical thinking?," last revised 26 November 2010, <https://criticalthinking.net/what-is-critical-thinking/>: "Critical thinking is reasonable reflective thinking focused on deciding what to believe or do." Access date for URLs in these notes: 1 September 2026. Daniel T. Willingham, "Critical Thinking: Why Is It So Hard to Teach?," *American Educator* 31, no. 2 (Summer 2007): even 3-year-olds can think in a known domain.

¹¹Willingham, "Critical Thinking": people have assumed critical thinking "is a skill, like riding a bicycle," and that once learned it applies in any situation; "Research from cognitive science shows that thinking is not that sort of skill." Daniel T. Willingham, "How to Teach Critical Thinking" (NSW Department of Education occasional paper, 2019): programs meant to teach general critical thinking skills have had limited success; "We are not even sure the general skills exist, but we are quite sure there is no proven way to teach them directly."

¹²Robert J. Stahl, "Using 'Think-Time' and 'Wait-Time' Skillfully in the Classroom," ERIC

stop, wait again. Struggle before rescue: ask, wait, hint, then model. You do not finish the reason. You do not grab the answer. A helper, including an AI tool, stays on your side of the table. It does not sit in the chair during the attempt.

4. Fluent is not a check. A smooth “because it’s fair,” “because the box says best,” or “because my friend said” can be a starting point. It is not the look.¹³ Leave this sentence and look at one other thing: the jar, the side of the box, the window, the door, the next page. If the look goes the other way, they may change their mind. That is the work. It is not losing.

5. Everyday stakes. No live controversy on the table. Practice on turns, snacks, stories, weather, a park sign, and a friend’s sentence about a shop. This book teaches *how to approach* disagreement. It does not rehearse live fights as content. If a real family disagreement is too hot today, pick the swing or the box. A path through ordinary challenges is the promise. A diploma is not. Birthday is not placement. There is no window that closes at ten.

The child talks and looks before the tool. You hold the key. If this week needs a compass, this is it. Five things. Then sit down and teach.

Digest ED370885 (1994), <https://files.eric.ed.gov/fulltext/ED370885.pdf>: think-time; about three seconds as a convention, not a sacrament; written for classroom teachers. Mary Budd Rowe, “Wait-Time and Rewards as Instructional Variables,” NARST paper, ERIC ED061103 (1972), <https://files.eric.ed.gov/fulltext/ED061103.pdf>, is elementary science class, not a homeschool trial. This book uses the pause so already-present reasoning can be heard.

¹³Deanna Kuhn, “How Do People Know?,” *Psychological Science* 12, no. 1 (2001): 1–8: young children have difficulty differentiating an explanation of why a claim makes sense from evidence that the claim is true. Sam Wineburg and Sarah McGrew, “Lateral Reading and the Nature of Expertise,” *Teachers College Record* 121 (2019): fact checkers leave an unfamiliar page; students and historians often stayed. At five to ten the same *direction of attention* is leave this box, this jacket, this friend’s sentence, and look at one other thing.

The Thinking Hour

The hour has a shape. Learn it once. Later chapters will give you today's move, today's try-it, and today's questions. They will not rebuild this hour. When a chapter says "run the session," it means this.

You do not need a school bell. You need a warm-up, a short model, a real attempt, one good question then wait, a chance to hear a wish offered as a reason, a look at one other thing, and an unaided exit. A five-to-seven-year-old may finish in ten minutes. An eight-to-ten-year-old may need twenty. The shape does not change. The object on the table does.

Sit down having already done the five-minute parent warm-up from *How to Use This Book This Week*. You know today's move well enough to hear "because I want it to be sunny." The child talks and looks. You hold the key. Ten minutes of a named move, a few times a week, is the right ambition. School enquiry was about weekly and still did not turn into a proven engine of generic thinking at scale.¹⁴ The honest pitch is *often enough that the question is familiar*.

¹⁴Education Endowment Foundation, "Philosophy for Children – second trial," completed November 2021, independent evaluator NFER, <https://educationendowmentfoundation.org.uk/projects-and-evaluation/projects/philosophy-for-children-effectiveness-trial>: 198 English primary schools, 5/5 padlock security; FSM-eligible pupils made, on average, no additional progress on Key Stage 2 reading (0 months); no evidence of impact on reading or maths for the whole cohort. Stephen Gorard, Nadia Siddiqui, and Beng Huat See, *Philosophy for Children: Evaluation Report and Executive Summary* (Education Endowment Foundation, 2015), ERIC ED581147: 48 schools, efficacy trial, reading about +2 months, maths about +2 months — the smaller trial that did not replicate at effectiveness scale. Dialogue may still be worth ten minutes as dialogue. Access date for URLs in these notes: 1 September 2026.

1. Warm-up

Two to four minutes. An object, a picture, or last week's claim they already know. This is retrieval, not a test of character. Say: "We're going to start with something you already know." Keep this short. The warm-up is not the lesson. A snack jar is a story a five-year-old can hold. A maxim about "seeing both sides" is a noise until it attaches to something they already know.¹⁵

2. Short model

Three to six minutes. One new move, visible. An object on the table. Then you stop. Show the move. Then fade.

Say: "I'm going to show this one short. Then you'll try." "Watch. I asked how she knows. Then I waited. Then we looked in the jar."

On the second pass, leave a hole: "Your turn to tell me how we could check. I'll hold the jar. You do the looking." When the idea is new, show one incorrect example — a wish offered as a reason — and ask what wouldn't count as a check. If you are still talking at minute eight, you are giving a lecture. Close the model.

3. Student attempt

This is the center of the hour. Five to ten minutes. The first talk and the first look are theirs. Hand them "For the student" if the chapter has it, or the first try-it from **How to teach it this week**. Then you talk less than you want to.

Say: "This one is yours. I'll be quiet." Then be quiet. If they stall, use this order: ask, wait, hint, then model. Not the reverse. Ask: "How do you know?" Wait. Count a slow three. The silence is the work. If you fill it, you took the problem back.

Hint, one hint: "You already know we can look in the jar. Point to it." Then, if they are still stuck after a real try: "I'm going to show you this one step. Then you

¹⁵Daniel T. Willingham, "Critical Thinking: Why Is It So Hard to Teach?," *American Educator* 31, no. 2 (Summer 2007): you can teach maxims about how students ought to think, "but without background knowledge and practice, they probably will not be able to implement the advice they memorize." Session shape in this chapter is pedagogical design for the kitchen table, not a national thinking-minutes study (none was found).

take it from here.” If they have nothing to think about, put the object back on the table. Keep your hands off their sentence. The child talks and looks. You hold the key.

4. One good question, then wait

Two or three minutes for the question itself; the talk around it can run longer, using the talk-box shape below. Not “did you get it?”

An authentic question is one for which you have not already written the answer. “What is the vocabulary word?” is recitation. “How do you know there are three?” is closer — if you do not already have the sentence you want to hear. Say: “How do you know?” Or: “What do you mean, *best*?”

Then wait. A slow three after you ask. A slow three again after they stop. Robert Stahl called that silence *think-time*; that label is classroom-origin, not a home-school trial. About three seconds is a convention, not a sacrament.¹⁶ Mary Budd Rowe found the same pause in elementary science class. That was science class. This book uses the pause so already-present reasoning can be heard.¹⁷ If they are mid-reason, do not cut them off. If the silence is hard, look at the object, the book, or the window, not at the child. One question. Maybe a follow-up. Then stop.

5. Hear a wish as a reason; look at one other thing

This is the teaching. A child says “because I want it to be sunny.” That is a wish. Hear it. A better question: “That’s why you hope so. What would show it?” Then, if a check is cheap and safe, do the look: the window, the jar, the side of the box, the door, the next page.

¹⁶Robert J. Stahl, “Using ‘Think-Time’ and ‘Wait-Time’ Skillfully in the Classroom,” ERIC Digest ED370885 (1994), <https://files.eric.ed.gov/fulltext/ED370885.pdf>: eight categories of classroom silence; about three seconds as a convention. Classroom-origin. Not a finding that wait-time teaches critical thinking.

¹⁷Mary Budd Rowe, “Wait-Time and Rewards as Instructional Variables: Their Influence on Language, Logic, and Fate Control,” NARST paper, ERIC ED061103 (1972), <https://files.eric.ed.gov/fulltext/ED061103.pdf>: elementary science classes; teachers typically waited about one second after a question and 0.9 seconds after a student answer; extending both to three to five seconds changed discourse. Rowe is science class. This book does not cite Rowe 1972 as a homeschool randomized trial.

A fluent sentence is not a check. “Because it’s fair,” “because the box says best,” “because my friend said” — starting points, not the look.¹⁸ Leave this sentence and look at one other thing. Hearing a wrong reason, then asking a better question, then naming a better reason if needed, is teaching. You may say: “I hear that. I’m not sure that reason works, because... What else could be true?” Correct the reason. Do not crush the talk. If the look goes the other way, they may change their mind. That is the work. It is not losing.

6. Unaided exit

Two to four minutes. One short task. Book closed. No hints. No chatbot. Say: “One sentence. I won’t help. That’s the point.” Ages 5–7: a spoken sentence or a caption. Ages 8–10: a line that names the old view and the new one after a look. If it is wrong, you diagnose which wrong reason this is. Fade until the check does not need you.

When to stop talking

After you ask, wait. If you fill the silence, you took the problem back. If you hear yourself explaining while they look, you have moved back into the model. Stop. Instead of “I was never good at arguments,” say today’s sentence: “How do you know?” Praise a clear look or a mind changed after a check — not speed. Hands in your lap. Count three.

The talk-box shape, once

Later chapters will fill this week’s opening question. They will not reprint this shape. When a chapter prints a talk box, it means this.

Opening question. Authentic. About what they mean, how they know, or what they can look at. No answer you have already written. Not “did you have fun” and

¹⁸Deanna Kuhn, “How Do People Know?,” *Psychological Science* 12, no. 1 (2001): 1–8. Deanna Kuhn and Susan Pearsall, “Developmental Origins of Scientific Thinking,” *Journal of Cognition and Development* 1, no. 1 (2000): 113–29: between about 4 and 6 the distinction between a theory that makes an event plausible and evidence that it occurred develops rapidly and remains incomplete.

not “what is the vocabulary word.” Use one: What do you think? What do you mean? How do you know? What else could be true? How could we check?

Three to five follow-ups. Pick; you do not need all five every Tuesday. Meaning: What do you mean, *best*? Reason: How do you know? Alternative: What else could be true? Check: How could we check? Mind-change: You thought X; we looked; you may change your mind.

How to wait. After you ask, a slow three. After they stop, wait again. If they are mid-reason, do not cut them off. Look at the object, the book, or the window, not at the child, if the silence is hard.

What a stuck silence usually means. The question was vague. Wait-time after the question was zero. They are searching for a word. They are guessing what you want. The question was recitation in disguise. They offered a wish where a look was asked for. Debug, once: a shrug → a smaller question and wait. Guesses what you want → wait after they stop, then “what do *you* think?” Doubles down on a wrong reason → hear it, ask a better question, then a look or a named fact. Talks forever with no reason → “what are we going by?” The session becomes a fight → stop, postpone, pick a smaller claim. Pose, wait, and point back at the object. You do not stack five questions, perform Socrates, or switch to a live controversy.

When two people do not agree, the same box holds. You do not have to win. You have to listen, then ask, then check. Listen: let them finish. Ask what they mean: “What do you mean, *your turn*?” Ask for a reason: “How do you know?” How could we check: leave this sentence and look at one other thing — whose bag is on the seat; the side of the box; the park sign; the window; the door of the shop. Wait. You may change your mind. If a real family disagreement is too hot today, pick the swing, the box, or the shop.¹⁹

¹⁹Willingham, “Critical Thinking”: the processes of thinking are intertwined with the content of thought; even trained scientists can fail outside a domain they know. Sam Wineburg and Sarah McGrew, “Lateral Reading and the Nature of Expertise,” *Teachers College Record* 121 (2019): professional fact checkers leave an unfamiliar page. At five to ten the same direction of attention scales to a cereal box, a jacket, a park sign, and a friend’s sentence — not a civic-web course. Joel Breakstone et al., “Students’ Civic Online Reasoning: A National Portrait,” *Educational Researcher* 50, no. 8 (2021): 505–15, is why the habit starts small (high-school sample); this book does not assign those items.

The in-home try-it shape, once

Later chapters will fill named types. They will not reprint this spine. When a chapter says “run the in-home try-it,” it means this.

Time. A short sit, then stop. Three minutes at dinner. Ten on the sofa. Thirty for ice to melt. Pedagogical design, not a national minutes table.

Materials. Household objects, a book already on the shelf, a box already bought. You do not need a kit.

Safety. Ordinary: water, heat, choking. No flame for a five-year-old. No tasting unknown things. Tone: curious, not courtroom. A kitchen fair test uses water, ice, cloths.

The fun. Counting cookies. Melting ice. Opening a picture book. Being heard about a turn.

The skill. How do you know. One change. Claim versus list. Wish versus look.

Types you will meet, not a lesson bank: sofa picture-book talk (10–20 min); one-question dinner (3–5 min); talk-box after a claim (2–8 min); wait drill, invisible; kitchen fair test (10–30 min); package on the counter (3–8 min); disagree and repair (3–10 min); last thoughts (1–2 min). A kitchen one-change check — change one thing, keep the rest the same, look — is a check type, not a science year.²⁰

The out-of-home try-it shape, once

“Outside” means the walk, the store, the park, the library, the museum as looking. Later chapters will fill named types. They will not reprint this spine.

Types you will meet: walk noticing (5–20 min of a walk you were taking anyway); puddle or weather check; store-label looking (3–8 min); library browse-and-talk (10–20 min); museum as looking (10–20 min at *one* object); park “what changed”;

²⁰Zhe Chen and David Klahr, “All Other Things Being Equal: Acquisition and Transfer of the Control of Variables Strategy,” *Child Development* 70, no. 5 (1999): 1098–1120: ages 7–10; explicit training plus probes beat probes-only on designing unconfounded experiments. Michael Schwichow, Christopher Croker, Corinne Zimmerman, Tim Höffler, and Hendrik Härtig, “Teaching the Control-of-Variables Strategy: A Meta-Analysis,” *Developmental Review* 39 (2016): 37–63: mean $g = 0.61$ on scientific-reasoning outcomes. A kitchen one-change check is that move, not generic critical thinking.

playground fair-ish test (one change — who throws *or* which ball, not both); bus or waiting talk (2–5 min; public quiet; no other-child interrogation).

Safety, once. Roads, water, unknown plants, other people’s dogs, aisle courtesy. No tasting unknown things. No shoplifting a “test.” No lecture to a stranger’s child. Notice, name, wonder, check if checking is cheap and safe.

The store box is a speaker. Speakers can be incomplete. What does this package say? How could we check? Body talk stays out. The library is a free thinking hour. In the last federal tables that asked, two-thirds of homeschool households used the library as a source of curriculum and books.²¹ A parent who stays for the questions after the book has used the free hour.

The AI rules, once

Later chapters will point here in one sentence. They will not reprint this box. Ages 5–10: scripts and parent–child talk, not live open chat.

The child talks to the parent. The parent may use a tool. The child does not sit alone with an open chat.

After the child has tried, you **may**, on your account:

- Ask a tool to **explain this page to you** from a **named** book page (title, page number). You still have to understand it well enough to hear a wrong turn.
- Ask for **extra questions**, then **vet** them. Throw out any question that imports a live controversy, a secret, or a pretend expert.
- Use a labelled **SCRIPT** — a short spoken sequence — only **after the child tried**. The script is a prompt for you to say, not a paragraph for the child to copy as their reason.
- Ask for a **hint** after an attempt. A hint is not the finished reason.
- Ask a tool to **diagnose a reason the child already gave**. You hear the diagnosis and decide.

²¹Jiashan Cui and Rachel Hanson, *Homeschooling in the United States: Results from the 2012 and 2016 Parent and Family Involvement Survey*, NCES 2020-001 (Washington, DC: National Center for Education Statistics, 2019), Table 6: 66 percent of homeschool households used the library as a source of curriculum and books in 2016. The 2023 First Look did not republish that table.

You **may not**:

- Park an **unsupervised chatbot** as the child’s only partner.
- Ask the tool to **write the child’s reason**.
- Ask the tool to **invent an expert identity** (“you are a fair-swing professor”) and then treat that voice as a person.
- **Grade** the child’s thinking from a **detector** score.
- Print a **certificate of thinking**.
- Ask the tool to **invent facts** (who was at the park, whether the shop is closed, what is in the box).

A tool that finishes the reason for you can make practice look better and leave the child worse when the window is closed. In a high-school math trial, an unguarded chatbot raised assisted practice about 48 percent and then cut the unaided exam about 17 percent.²² This is a useful study, not a promise that every home will see the same result. Then we teach. A fluent reason from a machine is performance, not the child’s check.

Detectors mislabelled more than half of some human essays as machine-written — 61.22 percent in one study.²³ A score is not a verdict on a seven-year-old’s sentence. Language models invent sources: in one study, 55 percent of GPT-3.5 citations and 18 percent of GPT-4 citations were fabricated.²⁴ If you asked a tool for a paper, open the paper.

Names, in ordinary language. Hermes 4 is a chat model. Hermes Agent is a different runtime — a computer that can keep going. Grok is a chat assistant. Grok Bot is a cloud-computer agent. A public-

²²Hamsa Bastani, Osbert Bastani, Alp Sungu, Haosen Ge, Özge Kabakcı, and Rei Mariman, “Generative AI without guardrails can harm learning: Evidence from high school mathematics,” *Proceedings of the National Academy of Sciences* 122, no. 26 (2025): e2422633122. Field experiment, nearly 1,000 Turkish high-school math students: a ChatGPT-like tool raised assisted practice grades 48 percent relative to control, then cut unaided exam grades 17 percent. This is a math trial, not a little-thinkers trial. The transferable caution is the crutch.

²³Weixin Liang, Mert Yuksekgonul, Yining Mao, Eric Wu, and James Zou, “GPT detectors are biased against non-native English writers,” *Patterns* 4, no. 7 (2023): 100779: average false-positive rate on human TOEFL essays 61.22 percent.

²⁴William H. Walters and Esther Isabelle Wilder, “Fabrication and errors in the bibliographic citations generated by ChatGPT,” *Scientific Reports* 13 (2023): 14045: 55 percent of GPT-3.5 citations and 18 percent of GPT-4 citations were fabricated.

school partnership for the assistant is a third Grok, not a U.S. home-school product. Game artist makes pictures. None of these is a critical-thinking class for this age. A chatbot answers in a window. An agent has tools and can keep going. Neither is a thinking partner for a five-year-old.

COPPA covers children under 13. The 22 April 2026 compliance date has passed.²⁵ Keep accounts, logs, and keys on the parent side. Homeschool is not a school official by default.

Not a secret friend. A tool that talks in the first person is still a tool. It does not get a bedroom, a private channel, or a promise to keep secrets from the parent.

You can teach this entire book with no AI. Many families will. The hour still has the same shape.

A Tuesday, said plainly

Here is an illustration, not a reported family. A parent has spent five minutes looking at a jar. The child warms up on last week's picture. The parent shows a short model, then puts the jar on the table. The child tries. The parent asks, "How do you know there are three?" and waits. The child says, "because I want three." The parent hears the wish, asks what would show it, and they look. Exit: "One sentence. I won't help." Right or wrong, the hour had a shape. On an eight-to-ten day the same shape holds, with a box instead of a jar and a line that names the old view and the new one after the look.

You can run that hour. You need today's move, a sentence you refuse to finish, and the willingness to stop talking. There is no national table of thinking minutes for the kitchen.²⁶ Later chapters will say: run the session as in *The Thinking Hour*.

²⁵Children's Online Privacy Protection Act, 15 U.S.C. §§ 6501 *et seq.*; 16 C.F.R. Part 312. Federal Register 90 FR 16918 (22 April 2025): amended Rule effective 23 June 2025; general compliance date 22 April 2026. Bright line: children under 13. Keep accounts on the parent side.

²⁶No IES or NCES page opened on 1 September 2026 prescribed a national homeschool thinking-minutes table. North Carolina DNPE *recommends* (not law) five hours across all subjects; Pennsylvania statute names 180 days or 900 elementary hours for the whole program. None of these is a national thinking block.

Chapter 1

What we mean

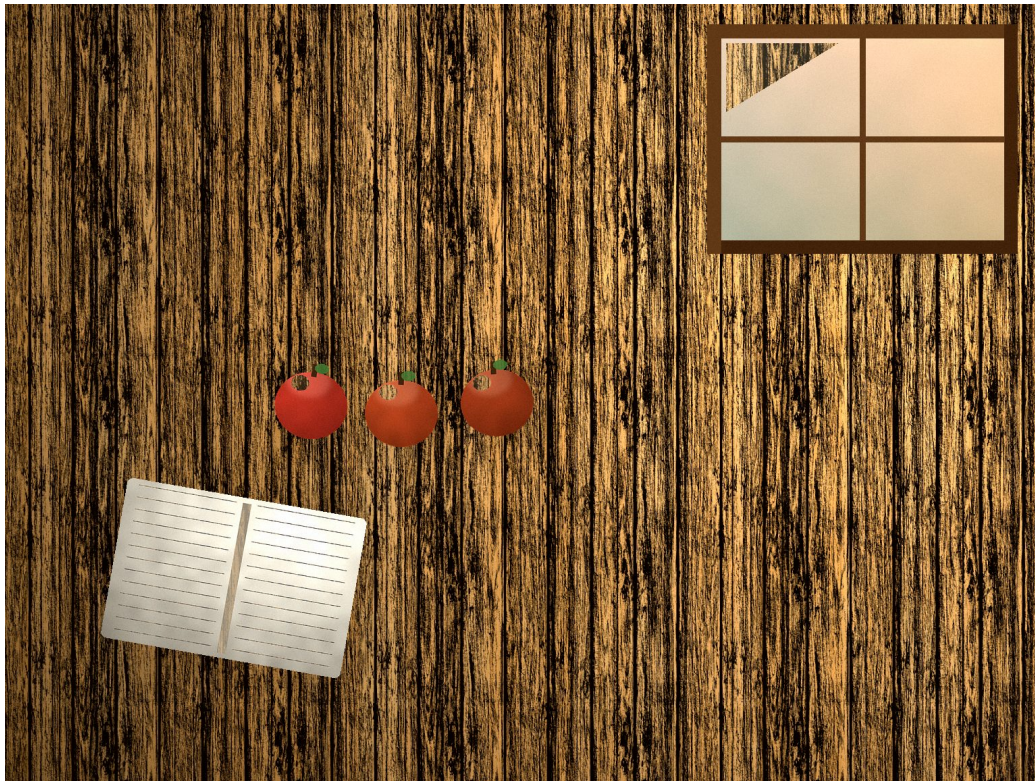


Figure 3: A kitchen-table still-life from a high three-quarter view: a clear jar with a few round cookies, an opened picture book face-up with unreadable pages, a small notebook, and a window showing grey sky. No people. No logos. No readable package branding.

Why this matters

How do you know there are three?

That is not a vocabulary question. It is not a test of whether the child can say *critical thinking*. It is a question about leftover snacks, asked at a table you already own, about a claim that might be true and might not. The jar is on the counter. Someone said there are three cookies left. The child wants there to be three. Wanting is real. Wanting is not a count.

This chapter gives you one sentence you can keep for the rest of the book. Robert Ennis wrote it as a working definition and kept it: critical thinking is reasonable reflective thinking focused on deciding what to believe or do.²⁷ Reasonable: there are reasons, not only a mood. Reflective: you pause long enough to look at those reasons. Focused on deciding: the work has a point. The last two words do the household work. A five-year-old deciding whether the leftover-snack claim is true, and a five-year-old deciding whose turn it is at the swing, are both inside that sentence. One is a decision about what to believe. The other is a decision about what to do.

“Critical” in this house does not mean “find the fault in people.” Ennis is plain about that. The English word can sound negative. The concept he is offering is not.²⁸ You are not training a small prosecutor. You are teaching a child to pause, to name a reason, and to look at one other thing before they settle.

Beside Ennis sits a second sentence, not a rival brand. Matthew Lipman said critical thinking is skillful, responsible thinking that helps good judgment because it relies on criteria, is self-correcting, and is sensitive to context.²⁹ On a playground: what are we going by? Can we change our mind? Is this a turn-taking object at all?

²⁷Robert H. Ennis, “What is critical thinking?,” *criticalthinking.net*, last revised 26 November 2010. “Critical thinking is reasonable reflective thinking focused on deciding what to believe or do.” Same sentence in Robert H. Ennis, *The Nature of Critical Thinking: Outlines of General Critical Thinking Dispositions and Abilities* (2013; last revised September 2015), <https://criticalthinking.net/wp-content/uploads/2024/04/The-Nature-of-Critical-Thinking.pdf>. Access date for URLs in these notes: 1 September 2026.

²⁸Ennis, *The Nature of Critical Thinking* (2015): although the word *critical* is sometimes used in a negative sense, the concept presented is not negative.

²⁹Matthew Lipman, “Critical Thinking—What Can It Be?,” *Educational Leadership* 46, no. 1 (1988): 38–43. Critical thinking as skillful, responsible thinking that facilitates good judgment because it relies upon criteria, is self-correcting, and is sensitive to context. ASCD PDF, https://files.ascd.org/staticfiles/ascd/pdf/journals/ed_lead/el_198809_lipman.pdf.

Two children cannot both sit in front on a horse. They can take turns. Homework is not a turn-taking object. Those are aims for the talk, not a promise that a branded philosophy hour will raise a reading score. The large English trial of Philosophy for Children found, on average, no extra months of progress in reading or maths; that finding belongs in the resources chapter.³⁰

Two refusals belong in the same sitting as the sentence, or the sentence becomes a poster.

Little kids already think in domains they know. Daniel Willingham put it in a line a parent can use: this is a type of thought that even three-year-olds can engage in, and even trained scientists can fail in.³¹ The National Research Council's *Taking Science to School* is the household picture of the same miss, used here only for children, not to turn this into a science book. The view that young children are concrete and simplistic thinkers is outmoded. Children arrive already knowing a great deal. What they can do at a particular age is not a simple function of a birthday.³² A child who says something false about weather, snacks, or a story is often applying a prior idea, not displaying an absence of thought. Start now. A readiness gate is the wrong wait.

Thinking is not a bicycle you install at six. People have treated critical thinking as a skill like riding a bicycle — once learned, usable in any situation. Thinking is not that sort of skill. The processes of thinking are mixed with the content of thought.³³ You can teach a maxim. Without something the child actually knows,

³⁰Education Endowment Foundation, “Philosophy for Children – second trial,” completed November 2021, independent evaluator NFER. 198 schools; about 3,601 pupils; Key Stage 2. FSM reading and whole-cohort reading: 0 months additional progress; no evidence of impact on maths; 5/5 padlocks. Aims in this chapter; the trial in the resources chapter. <https://educationendowmentfoundation.org.uk/projects-and-evaluation/projects/philosophy-for-children-effectiveness-trial>.

³¹Daniel T. Willingham, “Critical Thinking: Why Is It So Hard to Teach?,” *American Educator* (Summer 2007). Critical thinking “is a type of thought that even 3-year-olds can engage in—and even trained scientists can fail in.” AFT PDF, https://www.aft.org/sites/default/files/media/2014/Crit_Thinking.pdf.

³²National Research Council, *Taking Science to School: Learning and Teaching Science in Grades K–8*, ed. Richard A. Duschl, Heidi A. Schweingruber, and Andrew W. Shouse (Washington, DC: National Academies Press, 2007), Executive Summary and Chapter 3. The commonly held view that young children are concrete and simplistic thinkers is outmoded; children enter school with substantial knowledge of the natural world; what children are capable of at a particular age is not a simple function of age or grade. Used here for children’s capabilities, not as a science scope-and-sequence. doi:10.17226/11625.

³³Willingham, “Critical Thinking” (2007): people have assumed that critical thinking is a skill

and without practice on that something, the maxim will not implement. That is not a reason to wait until adolescence. It is a reason to practice on the jar, the window, the swing, and the story on the sofa, and to revisit next Tuesday. Practicing on snacks does not install unaided good judgment on unfamiliar content. Near is not far.

This book is not a sequel to *Critical Thinking for Life*. That book is for older students. One pointer, then we teach at five to ten. Leave the page, later, is still leave this cereal box, this jacket, this park sign. When a machine finishes, later, is still: the child talks and looks first. The work this week is ordinary.

What this idea unlocks is everything later. If “critical thinking” still means a personality, a compliment, or a workbook cover, the five moves in the next chapter have nowhere to sit. If it means Ennis’s activity, you can hear a wrong turn this week: a wish offered as a look; a fluent sentence with no check; “critical” as finding fault. Hearing that is worth the struggle.

You do not need to be a philosopher. You do need to understand today’s idea well enough to hear “because I want it to be sunny” as a wish, not a look out the window.

This week you can learn Ennis’s sentence in ordinary language, and how to hear “because I want it” as a wish. Today the child can look in a jar or out a window, say how they know, and change the sentence if the look goes the other way.

For the parent: understand it yourself

Many adults feel rusty around the word *critical*. That is ordinary. Five minutes of this section, then the warm-up at the end, is enough for tomorrow. The child still does the talking.

Everyday picture. The jar is on the counter. Yesterday there were more. Someone — a sibling, a visiting cousin, the child — says, “There are three left.” Two decisions hide in that sentence. What do you believe? And what do you do — save one, share, wait until after lunch? Ennis’s sentence is the picture of that kitchen. The thinking is reasonable if the child can name a reason. It is reflective if they pause long enough to look at the reason, and at what follows if the reason is weak. It is focused on a decision, not on sounding sharp.

like riding a bicycle; research from cognitive science shows that thinking is not that sort of skill; the processes of thinking are intertwined with the content of thought.

A second kitchen picture, still ordinary. Two children want the same swing. “It’s my turn.” That is a decision about what to do. The reasons might be good. They might be a wish wearing a fairness-word. Ask what they mean by *turn*. Wait. Look at one other thing: whose bag is on the seat, what you said last time, whether there is a sign. That is already the activity, sitting inside a Tuesday you were going to have anyway.

Precise picture. Write the sentence out: *reasonable, reflective thinking about what to believe or do*. Circle *reasonable*. Reasons can be checked. A feeling can be real and still not be a reason. Circle *reflective*. You pause. You look at the grounds. Suspended judgment is part of that work, and it is a little uncomfortable. That discomfort is not a design flaw. Circle *believe or do*. Appraisal without action is only half a life. Action without appraisal is a reflex. The activity is both. Ennis’s longer outline of dispositions and abilities does not specify a grade level, a sequence, or a subject.³⁴ It is not a kindergarten syllabus. Steal the clarifying questions a parent can actually hear: Why? What do you mean by...? What would be an example? What would *not* be an example? Those are moves. They are not a bicycle.

Lipman’s three features sit beside that sentence as aims, not as a trial. A criterion is what you are going by. Self-correction is permission to change a mind when a better reason shows up. Context is noticing that turns fit the horse and the swing, and do not fit doing each other’s homework. A parent and one child do not vote in a circle. You can still ask, “What are we going by?” You can still say, “You may change your mind.” You can still notice that this object is not a turn-taking object.

Willingham’s bicycle belongs next to Ennis, not later. Riding, once learned, works whenever a bicycle is present. Thinking is not that sort of skill.³⁵ Even a three-year-old can think carefully in a domain they know — preschoolers using patterns of evidence on a toy box that plays music, as Willingham reports. Even a trained scientist can fail outside theirs. You can teach “look from more than one side,” but without knowledge of the thing, they cannot.³⁶ Generic programmes have had

³⁴Robert H. Ennis, “An Outline of Goals for a Critical Thinking Curriculum and Its Assessment,” criticalthinking.net, revised 18 October 2000. The outline “does not specify grade level, curriculum sequence, emphasis, teaching approach, or type of subject-matter content.” Clarifying questions include Why? What do you mean by...? What would be an example? What would not be an example? <https://criticalthinking.net/longdefinition/>.

³⁵Willingham, “Critical Thinking” (2007), bicycle passage as in note 33.

³⁶Willingham, “Critical Thinking” (2007): you can teach maxims about how students ought to think, but without background knowledge and practice they probably will not implement the

limited success; transfer, when tested, has been absent, modest, or quick to fade.³⁷ Name the move in a known domain. Give the child something to think about. Revisit.

A third precise mark, so you can hear the mash that will walk into the room. Deanna Kuhn and Susan Pearsall showed four- and six-year-olds a picture sequence of a race. One runner has fancy sneakers — a good story about *why* someone might win. The last picture: one runner holds a trophy and grins — a look that he *did* win. Asked “How do you know he won?”, four-year-olds often answered not with the trophy but with the sneakers. Six-year-olds distinguished most of the time and still made mistakes. Adults in that study did not mash the two.³⁸ The finding is not that six-year-olds now have scientific method. They still distinguish theory and evidence in only a limited sense and set of contexts. Adults still replace a look with a good story, in other rooms. For this week: “because he has fast sneakers” is a *why* offered as a *how*. “Because I want three” is a *wish* offered as a count. Hear it. Then look in the jar.

Children already treat what people say as information, and they already weigh speakers. Four-year-olds, in the work Paul Harris and Melissa Koenig report, can track who has been accurate, and they will ignore even a previously reliable speaker if the claim conflicts with what they themselves have seen.³⁹ The next teaching object is not “trust no one.” It is the reason and the check. Take the

advice; multiple-perspectives maxim fails without knowledge of the issue. Blicket-detector work as Willingham reports it: preschoolers using patterns of evidence in a known toy domain.

³⁷Daniel T. Willingham, “How to Teach Critical Thinking,” NSW Department of Education occasional paper (2019). Programs meant to teach general critical thinking skills have had limited success; when transfer is tested, positive results have been absent or modest and quick to fade. Author PDF, http://www.danielwillingham.com/uploads/5/0/0/7/5007325/willingham_2019_nsw_critical_thinking.pdf.

³⁸Deanna Kuhn and Susan Pearsall, “Developmental Origins of Scientific Thinking,” *Journal of Cognition and Development* 1 (2000): 113–129. Race / trophy sequence: four-year-olds often answered “How do you know he won?” with a theory (fast sneakers) rather than evidence (the trophy); six-year-olds distinguished most of the time (prompted mean 4.19 / 6) and still made mistakes; adults 6.00 / 6. The 6-year-old distinction remains limited in sense and context. Same study reported in Deanna Kuhn, “How Do People Know?,” *Psychological Science* 12, no. 1 (2001): 1–8.

³⁹Paul L. Harris and Melissa A. Koenig, “Trust in Testimony: How Children Learn about Science and Religion,” *Child Development* 77, no. 3 (2006): 505–524. Children accept testimony and already weigh speakers. Four-year-olds can track a previously accurate informant (Koenig and Harris, 2005, abstract) and ignore even a reliable speaker whose claim conflicts with what they have seen (Clément, Koenig, and Harris, 2004).

sentence seriously. Still look in the jar.

There is no thinking gene. There is no window that closes at ten. There is no stage calendar in this book that tells you a five-year-old cannot reason and an eight-year-old suddenly can. What a child can do is a mix of maturation, experience, and instruction. Development is not an inevitable unfolding you wait out.⁴⁰ A five-year-old may ask a sharp “how do you know” about a puddle and still mash a wish with a look on a snack. A ten-year-old may read chapter books and still practice the same jar. Placement is by skill, not birthday.

Wrong answers you should be able to hear

1. “*Because I want there to be three.*” A wish offered as a look. Desire is earlier and easier than belief, in the ordinary development of other minds. The child used the earlier category where you asked for a count.⁴¹ Hear it. Say: “I hear that you want three. How do you know there *are* three?” Then look in the jar. If the look goes the other way, they may change the sentence. That is the work. It is not losing.
2. “*Critical thinking means finding what is wrong with people.*” The English word did the damage. Ennis’s concept is not negative. Return to the jar. The work is deciding what to believe or do, with reasons. Ranking people is a different speech act.
3. “*Once they learn it, they can use it anywhere — like riding a bike.*” That is the assumption Willingham answered. Thinking is mixed with what is being thought about. A child who can count the cookies and then treats a new story as if the same moves were automatic has assumed the bicycle. Name the domain. Practice the decision *here*. Cue the similarity next Tuesday: “this is like the jar.”
4. “*They’re too little. We’ll wait until they’re older.*” Little kids already think in domains they know. Trained scientists fail outside theirs. Waiting for a readiness gate is the outmoded concrete-thinker story. Start now, with

⁴⁰National Research Council, *Taking Science to School* (2007), Executive Summary: what is developmentally appropriate is not a simple function of age or grade, but is largely contingent on prior opportunities to learn; development is not a kind of inevitable unfolding.

⁴¹Henry M. Wellman and David Liu, “Scaling of Theory-of-Mind Tasks,” *Child Development* 75 (2004): 523–541 (abstract and task descriptions): diverse desires typically earlier than diverse beliefs; knowledge access sits between diverse belief and false belief. Used here as a caution about wishes versus looks, not as a testing kit.

ordinary life. A false sentence about the weather is often a prior idea doing work, not an absence of thought.

5. “*We talk a lot, so they’re already doing it.*” Talk is not automatically the activity. Implicit hope that “we value thinking” will not do the naming.⁴² If you want the child to ask how they know, you have to ask how they know, often, out loud. A fluent sentence is not a check. Leave this sentence and look at one other thing.

A sixth you will also hear: “I already know, because Maya said,” or “because the box says best,” said as if the saying were the look. Testimony is information. The child already weighs speakers. Still ask: did you see, or did someone tell you, or do you hope so? Then, if a check is cheap and safe, do the look.

Five-minute parent warm-up

Do this before the lesson, with a jar or a window and a scrap of paper, no child in the room.

Minute 1. Write Ennis’s sentence. Say it out loud in ordinary words: “The work is deciding what to believe or do, with reasons, after a pause.”

Minute 2. Take one claim from this house — leftover snacks, whose turn, the sky. Write two columns: *believe?* and *do?* Put one reason under each. Put one check under the reason.

Minute 3. True or false, said aloud: “Wanting three is the same as counting three.” “Critical means finding fault.” “Once you have it, you have it everywhere.” You are practicing the hearing, not racing.

Minute 4. Imagine the child saying “because I want it.” Decide, without performing, what a scold would do. Decide what “I hear that you want it. How do you know?” would do instead. You are installing the miss so you can hear it tomorrow.

Minute 5. Write the sentence you will actually say: “How do you know there are three?” Put the pencil down. That sentence is the lesson.

⁴²Philip C. Abrami et al., “Instructional Interventions Affecting Critical Thinking Skills and Dispositions: A Stage 1 Meta-Analysis,” *Review of Educational Research* 78, no. 4 (2008): 1102–1134. Improvement “cannot be a matter of implicit expectation.” Mixed-age literature. Abrami et al. (2015): elementary ages 6–10, $k = 49$, $g = 0.37$ on standardised tests, not kitchen talk; dialogue + authentic problems + mentoring $g = 0.57$ is 19 mixed-age studies, not kindergarten. The overall $g+ = 0.30$ is not a grade-1 result.

If you can do those five minutes, you are ready to sit down. The child looks. You hear.

How to teach it this week

A good thinking hour this week has a shape. The thinking-hour chapter in the front of this book is the full version, including the talk-box shape, the in-home and out-of-home try-it shape, and the AI rules. Here is the shape scaled to this idea.

Warm-up (2–3 minutes, unaided). One claim already in the house. “What did we think last time about the jar?” No device. No definition.

Short model (3–5 minutes). One new idea, one picture, one spoken sentence. You look in a jar, or out a window, and you say how *you* know, in two lines. Then you stop. You are showing the pause, not delivering a lecture titled *Critical Thinking*.

Student attempt (5–10 minutes). The longest block, and it is still short. The child looks. The child talks. You wait. Struggle before rescue: ask, wait, hint, then a short model on *your* scrap, not as their reason.

One good question. Not “what is critical thinking?” A question that names the idea: “How do you know there are three?” “What do you mean, *left*?” “Did you see, or did someone tell you, or do you hope so?”

Talk (3–5 minutes). One spoken sentence, or a caption the child can say while you write it: “I thought there were three. We looked. There are two.” You are not assigning a paragraph. Eight-to-ten may write the line themselves.

Stop. While they still have a look left in them. A second sitting later in the week beats a long sit that ends in a fight.

That shape is a practice you impose on whatever snack, walk, or book is already in the week. It is not a 180-day plan. School enquiry hours were roughly weekly and still did not move reading and maths at scale in the large English trial. The honest pitch is *often enough that the question is familiar*, not a dosage study. Ten minutes of a named move, a few times a week, is the right ambition.

Exact wording you can say

On a snack claim:

“How do you know there are three?”

“What do you mean, *left*?”

“Did you see, or did someone tell you, or do you hope so?”

On a turn:

“What do you mean, *your turn*?”

“What are we going by?”

“Is this a turn-taking thing?”

On the sky:

“How do you know it’s going to rain?”

“We can look.”

When you are about to take over:

“Your eyes. I’ll wait.”

Then wait. After you ask, a slow three is a convention, not a sacrament. After they stop, wait again. If they are mid-reason, do not cut them off. Look at the jar, the book, or the window, not at the child, if the silence is hard. Mary Budd Rowe measured those pauses in elementary *science* class, not at a kitchen table. Robert Stahl later called the silence think-time and wrote for classroom teachers generally. Use the move. You are not replicating a science-class study.⁴³

Age-band moves: 5–7 / 8–10

5–7. Speech is talk, not an essay. The check is near: the jar, the window, the page. First-order false belief is usually in place — a character, or a sibling, can be wrong about the world because they did not see. How-do-you-know is improving; the sneakers-versus-trophy mash is still in the room, most of the time less so by six, still limited. Selective trust is already there. Mind-change is often perceptual: I

⁴³Mary Budd Rowe, “Wait-Time and Rewards as Instructional Variables, Their Influence on Language, Logic, and Fate Control,” paper to the National Association for Research in Science Teaching, Chicago, April 1972, ERIC ED061103. Elementary science class; typical wait about one second after a question and 0.9 seconds after a student response; extending both to 3–5 seconds changes discourse. Not a homeschool trial. Robert J. Stahl, “Using Think-Time and Wait-Time Skillfully in the Classroom,” ERIC Digest ED370885, 1994. Think-time as a later instructional construct; about three seconds as a convention, not a sacrament; eight categories of silence; written for classroom teachers generally.

thought it was raining; I looked; it is not. You write the caption if writing fights the sitting.

8–10. Same moves, different grain. They can hold two minds under a prompt: what does this character think the other character thinks, in a story they know. They can apply a criterion across two contexts: turns at the swing, not turns at homework. They can read a jacket, a sign, a box. Wait can include writing one line: “I thought . **We looked. Now I think .**” They are still constrained by knowledge. They still mash a good story with a look, some days. There is no diploma at the end of this band, and no window that just closed.

Not a stable skill at either band: unaided far transfer; Ennis’s full adult outline; multivariable coordination of theory and evidence. Same faculty. Different grain. Not two species of child.

First try-it for the student

The jar already on the counter, no vocabulary card:

someone has claimed there are three.

Say: “How do you know there are three?”

Wait. If the child names a wish, they used desire. Hear it. Ask how they know there *are* three. If they say “because Maya said,” they used testimony. Ask whether they saw, or were told, or hope so. Then look. If they point and count, they looked. If they stare, model on a *different* small set — two spoons in a cup, said as “I thought two. I looked. There is one.” — then return to the jar.

Later the same week, the diagnostic item:

the same jar, but you also mention that yesterday there were three, without looking.

If they still say three because yesterday, yesterday is weak. Ask what we can look at *now*. That is the seed of leave-this-sentence. It is not a news-literacy course.

How to fade help. First sitting: you look together, you say how you know, they echo. Second: they look, you wait, you hint (“we could open it”). Third: they look and say the sentence. Fourth: a cousin of the same claim — the window, a turn — with the book closed. The word *critical thinking*, if it arrives at all, arrives after the look.

When to stop talking. When you hear yourself answering. When the sit has become a lecture titled *What Thinking Is*. When the child has offered a reason and

you have already asked a second and a third question before they finished the first. One good question beats five. Stop while they still have a look left.

Practice that actually builds learning

Blocked, for a new move. The day you introduce “how do you know,” give a short set that is only that: the jar, the claim, the look. The day you introduce whose turn, only the disputed object. Mixing too early makes the child hunt for the “right” school move instead of looking.

Mixed, for when to use it. Later the same week, the jar reappears next to the window and the story. Mixing is the practice of choosing: is this a count, a sky, a turn, or a character who did not see? You impose that mix on the week you already have.

One incorrect example to diagnose. A fluent sentence with no check: “There are three because I want three.” Or: “It’s my turn because it’s fair.” Hear the wish. Hear the fairness-word. Neither is yet a look. The repair is a better question, then the jar or the bag on the seat, then — if needed — a named fact. Silence in the face of a false reason is not kindness.

These are illustrations, not reported families.

Named try-it: Snack claim (in-home)

Time. Three to eight minutes. Then stop.

Materials. The jar already there. Cookies, crackers, apple slices — whatever is actually left. A scrap of paper if you want a caption.

Safety. Ordinary food hygiene. No shaming who ate what. No using the count as a trap about sneaking. The tone is curious, not courtroom.

The fun. Looking in the jar. Being the person who finds out.

The skill. Decide what to believe. Are there three? How do you know? A wish is not a count. Mind-change: look.

Say: “How do you know there are three?” If they count and the number is two, they may say the new thing. If they refuse to change, hear the old sentence, look again together, and offer: “You thought three. We looked. You can say two.” Changing a mind when the check goes the other way is the work. It is not losing.



Figure 4: A clear jar on a table, lid off, three round cookies visible inside, a small notebook with a dated blank line beside it. No people. No logos.

Named try-it: Whose turn (in-home)

Time. Three to five minutes, when it actually happens. Skip a staged fight.

Materials. The swing, the bike, the bathroom, the cushion — the thing already in dispute.

Safety. No humiliation. If the stakes are too hot, postpone and pick a smaller claim. You are not putting anyone on trial in the hallway.

The fun. Being heard. Having the reason named.

The skill. Decide what to do, with a criterion and with context. Fairness is a criterion. Context: sometimes turns, sometimes not. Homework is not a turn-taking object. Two people cannot both ride in front on a horse; they can take turns. Lipman already used pictures like those as aims.⁴⁴

Say: “What do you mean, *your turn*?” Then: “What are we going by?” If they say “because I want it,” that is a wish. If they say “because it’s fair,” ask what *fair* is being asked to mean this time. Look at one other thing: whose bag is on the seat, what you said last time, a clock, a sign. Then decide what to do. The decision can still be yours as the adult. The child still got to name a reason and look.

Named try-it: Window check (out-of-home)

Time. Two to five minutes of a walk you were taking anyway, or at the door before you go.

Materials. The actual sky. Optional: a scrap for today’s mark.

Safety. Ordinary looking. Roads. No staring at the sun. If lightning, go in.

The fun. Being right, or changing your mind, about weather.

The skill. Testimony versus observation. “I thought it was raining.” Look. Grey sky is not yet rain. A friend’s sentence is not yet the window.

Say: “How do you know it’s going to rain?” If they say “because I want it to be sunny,” they offered a wish where a look was asked for. If they say “Maya said,” take Maya seriously, then look. Repeat the check — the sky — not Maya’s sentence in a singsong. Come back in ten minutes if you want a second look. Mind-change across a short wait is still the activity.

⁴⁴Lipman, “Critical Thinking—What Can It Be?” (1988): turns on a horse; playground turns; simultaneous fairness (birthday cupcakes) versus sequential fairness (Pin the Tail); *Wondering at the World* for ages 9–10 on when turns are appropriate (homework is not a turn-taking object). Aims, not trial evidence.

Out-of-home cousin of the jar: the same question, a different object. You do not need a nature programme. You need the sky that is actually there.

Named try-it: Story character who might be mistaken (in-home, with a library cousin)

Time. Five to ten minutes with a book you were already reading.

Materials. One known picture book. Not a stack. Not a theme unit.

Safety. Ordinary reading. Skip a page that is a live fight. If the display at the library is a live controversy, walk to a different bay.

The fun. Catching the mix-up. Being the person who noticed what the character did not see.

The skill. A mind can be wrong about the world. The character did not see the snack moved; the character will look in the old place. That is a first-order false-belief *type*, not a laboratory task you administer, and not a diagnosis.⁴⁵

Say: “What does she think is in the box?” Then: “Is she right? How do you know?” Point at the picture. Five-to-seven: what she thinks versus what is so. Eight-to-ten, under a prompt: what does she think *he* thinks? Still a known story. Still not a transferable gym.

Out-of-home cousin: library browse-and-talk. Ten to twenty minutes. The child chooses among three safe books. You still pick the prompt. Same move, a book they chose. A later chapter will spend the library as a free thinking hour. This week, one book and one mistaken character are enough.

⁴⁵National Research Council, *Taking Science to School* (2007), Chapter 3, reporting the standard false-belief task after Heinz Wimmer and Josef Perner (1983): robust improvement between age 3 and age 5 in predicting that a doll will search in the old rather than the new location. Used here as a story-character *type*, not a lab task to administer at home.

Talk box

This is an illustration, not a reported family. The jar is on the table. Someone has said there are three. The parent has not announced a definition.

Opening question

“How do you know there are three?”

Not: “What is critical thinking?”

Follow-ups (pick three to five; you will not use all of them every sitting)

1. What do you mean, *left*?
2. Did you see, or did someone tell you, or do you hope so?
3. What else could be true?
4. How could we check?
5. You thought three. We looked. You can say the new thing.

How to wait

Ask. Count a slow three in your head. Look at the jar, not at the child’s face, if the silence is hard. After they stop talking, wait again before you speak. If they are mid-reason, do not cut them off. A follow-up that arrives in half a second trains the child to wait *you* out, not to look. Three seconds is a convention, not a sacrament — Stahl’s think-time, from classroom teaching. Rowe’s windows were science class. Use the pause. Neither is a homeschool trial of critical thinking.

What a stuck silence usually means

They offered a wish where a look was asked for, and they can feel the mismatch. Or wait-time after the question was zero, and they learned that you will fill it. Or they think “critical” means finding fault, and they are hunting for who is in trouble. Or the question was vague. Or they are searching for a word. Or they are guessing what you want. Or the question was a recitation item in disguise — you already had “three” in mind as the only allowed answer. Next move: smaller question, wait, point back at the jar. “Open it?” is a hint. The finished count is not a hint; it is the grab. Done enough this week: a spoken sentence. “I thought three. We looked. There are two.”

For the student

This page is for you.

Critical thinking is a grown-up name for something you already do. You decide what is true. You decide what to do. You give a reason. You look.

It is not a way to find what is wrong with people. It is not a bicycle you get on once and then ride everywhere. It is thinking about this jar, this sky, this turn, this story — things you know something about.

A tiny worked example

There is a jar on the table.

Someone says there are three cookies left.

You want there to be three.

Wanting is not how you know.

You look.

There are two.

You can say: “I thought three. I looked. There are two.”

That is the whole trick for today. You are allowed to change the sentence when you look.

Two tries

1. Look in a real jar, or a cup of spoons, or a box of crayons. Say how you know how many are there. If you hoped for a different number, say the number you see.
2. Look out a real window, or stand at the door. Say how you know about the sky. If you thought it was raining and it is not, you may change your mind. That is not losing.

Write nothing if writing fights the sitting. Talk the sentence. Your grown-up can remember it. If you are older and writing is easy, you may write: “I thought . **We looked. Now I think .**”

Explain it back

Tell someone at the table, in your own words, how you know there are two, or three, or none. Then say one time you wanted the answer to be different, and you looked anyway. Then point at a story picture and say what the character thinks, and whether the character is right.

Challenge

Some people say “there are three” because they want three. Some people say “it’s my turn” because they want the swing. Some people say “it’s raining” because a friend said so, and they do not look. What would those three moves mean? How do you look at the *thing* instead — the jar, the bag on the seat, the sky? How do you ask how you know?

You are allowed to struggle. You may use a jar, a window, a book. You look. You talk. If you get stuck, ask for a hint — not the finished count. Then try again.

When you talk, a sentence about what you looked at is enough for today. You do not have to write a paragraph. You do not have to call yourself a critical thinker. Today you look, you say how you know, and you may change your mind.

A picture a computer made of a jar is a scene. It is interesting. It is not the jar.

If it isn’t clicking

Three diagnostics. Each one has a next move. None of them is a verdict on talent, and none of them is a reason to wait for a birthday.

1. The child offers a wish where a look was asked for, and cannot yet hear the difference.

“Because I want three.” “Because I want it to be sunny.” “Because it’s my turn” with no criterion. Desire is doing the work of a count. Next move: smaller claim, nearer check. One jar. One question. Wait. Name the wish kindly (“I hear that you want three”) and ask the how-do-you-know again. Then look together. If this is still the bottleneck after several weeks of short sits, stay here. The five moves in the next chapter will not hold on top of a child who cannot yet tell a wish from a look. A human who will sit with a jar and wait, not a tablet that narrates the answer, is a reasonable next step if you have tried the small-set work and the mash is still the whole hour.

2. The child recites a definition, or hunts for who is at fault, and cannot point at the jar.

The cue is still your voice, or a morale word, or the English word *critical*. Next move: objects first, look second, question third. Cover any vocabulary. Finger on the jar. The prompt is always through the looking: “How do you know there are three?” After an attempt, one incorrect example to explain (“this person said three because they wanted three — what did they use?”). Slow down the “what is thinking” talk until a sentence can be tied to a look. A child who can chant a definition and cannot open the jar is not ready to skip this. Go ahead once they can look, say how they know, and change the sentence when the look goes the other way. A tutor is useful if recitation remains the default after a couple of weeks of daily object-first work *and* the hour has become a fight.

3. The child will not talk, or every sitting ends in a shrug, and the silence after your question is a wall.

Talk is the product, and a shrug is the mind at rest — or the wait was zero, or the question was vague, or they are guessing what you want. Next move: shorter sits, one object, the opening question from the talk box, wait a slow three twice. If silence is hard, you look at the jar, not at them. An authentic question is one you do not already have the sentence for. If you hear yourself answering, you have started doing the work. If they offered a wish, they may be stuck on the mismatch; name it and look. If the hour has become a fight after a stretch of daily short sits, a human who will wait, not a chatbot that fills the silence, is the release valve.

When to slow down. Wishes still wearing reason-clothes. Recitation still the default. Sits so long that looking never starts. “Critical” still meaning fault. Those are brakes. “Not ready” because of age is the brake this book will not use. “Not ready” because a wish and a look have not yet come apart is a real brake. Ennis’s long outline is not a reason to skip the jar.

When to go ahead. The child can look in a jar and say how they know, not how they hope. A window check has produced at least one mind-change or one confirmed look. A turn has had “what do you mean” asked, and one other thing looked at. A story character has been wrong on the page, and the child could say so, pointing. Short sits are ordinary. Then the five moves in the next chapter have somewhere to sit. Being “good at arguing” because a child loves to talk is not a reason to skip the look.

When to get a human tutor. You have run the jar, or the window, or the wait after

the question, for a stretch of daily sittings, and the same diagnosis is still the one in the room, and the hour has become a fight. A tutor is a release valve, not a failure of the sitting. Keep yourself as the person who can still hear a wish-as-reason and a fluent sentence with no check. Outsourcing the hearing is the thing to avoid, not asking for help.

Hearing which strand is thin — talk without a look, or a look without talk — is enough.

Tools, including AI

Optional helpers for you, the adult. The full rules live in the thinking-hour box in the front of this book. This chapter is a pointer, not a second policy paper.

The short version: the child talks and looks first. You hold the jar and the question. A tool may explain today's idea *to you*, suggest extra questions you then vet, write a short script for *you* to say after the child has tried, offer a hint after an attempt, or help you diagnose a reason the child already gave. The child looks at objects. The child talks in the room.

Leave these out of the hour: a chatbot as the only partner; a tool that writes the child's reason; a pretend expert; a detector score; a certificate of thinking; a tool asked to invent whether the shop is closed or what is in the box. Ages five to ten are scripts and parent-child talk, not live open chat.

A language model will happily finish the count. Treat every model-supplied "as we saw" as untrusted until it lives in the jar or in a named book page. Fluent talk from a tool is performance, not the child's look. In a high-school math study, an unguarded chatbot made practice look better and left students worse when the window was closed. That paper is mathematics, not a thinking trial. The crutch is still the sitting condition.⁴⁶ If the tool produces the reason, the child is a spectator.

A jar, a window, and a book are tools too. Use them, then fade them.

⁴⁶Hamsa Bastani, Osbert Bastani, Alp Sungu, Haosen Ge, Özge Kabakçı, and Rei Mariman, "Generative AI without Guardrails Can Harm Learning: Evidence from High School Mathematics," *Proceedings of the National Academy of Sciences* 122, no. 26 (2025): e2422633122. GPT Base raised assisted practice grades 48 percent relative to control, then cut unaided exam grades 17 percent, in a high-school mathematics randomized trial. Not a 5–10 thinking trial. The sitting condition — a tool that produces the response — is the mechanism used here.

What “done enough” looks like

Placement is by skill, not birthday. A “grade 2 critical thinking workbook” is a publisher’s scope, not a legal grade, and not a transcript line. A picture book, a kitchen jar, and a walk can place the same child in three different rooms, because they cut the grain differently. Choose by fit. This book names programmes as options in the resources chapter. It does not rank them. The record, when you need one, is a notebook of questions, dated, stimulus named. The title a stranger can read is still Reading, or Science. It is not Critical Thinking I.

Checklist before moving on

- You can say Ennis’s sentence in ordinary language: deciding what to believe or do, with reasons, after a pause.
- You can hear “because I want it” as a wish, not a look.
- The child can look in a jar (or a cup, or a box) and say how they know how many, not how they hope.
- At least one window or doorstep check has happened: testimony or a wish, then the sky.
- At least one turn has had “what do you mean” and one other thing looked at, without humiliation.
- A story character who might be mistaken has been named, pointing at the picture.
- The child has changed a sentence after a look, or has confirmed a look, without being asked to perform a trait.
- Sits can be short. A spoken sentence is enough. You did not require a definition or a diploma sentence.
- You can hear a wish-as-reason, a fluent fairness-word with no check, and “they’re too little,” and you can ask a good question, without taking the looking.

If most of that list is true, go on to the five moves, even if the birthday says otherwise. If the birthday says “third grade” and the wishes are still doing the work of the looks, stay. The next chapter names wait, meaning, how-do-you-know, what-else, and how-could-we-check, with the jar still in the room.

A path through ordinary challenges is the promise. A diploma is not.

Chapter 2

The five moves

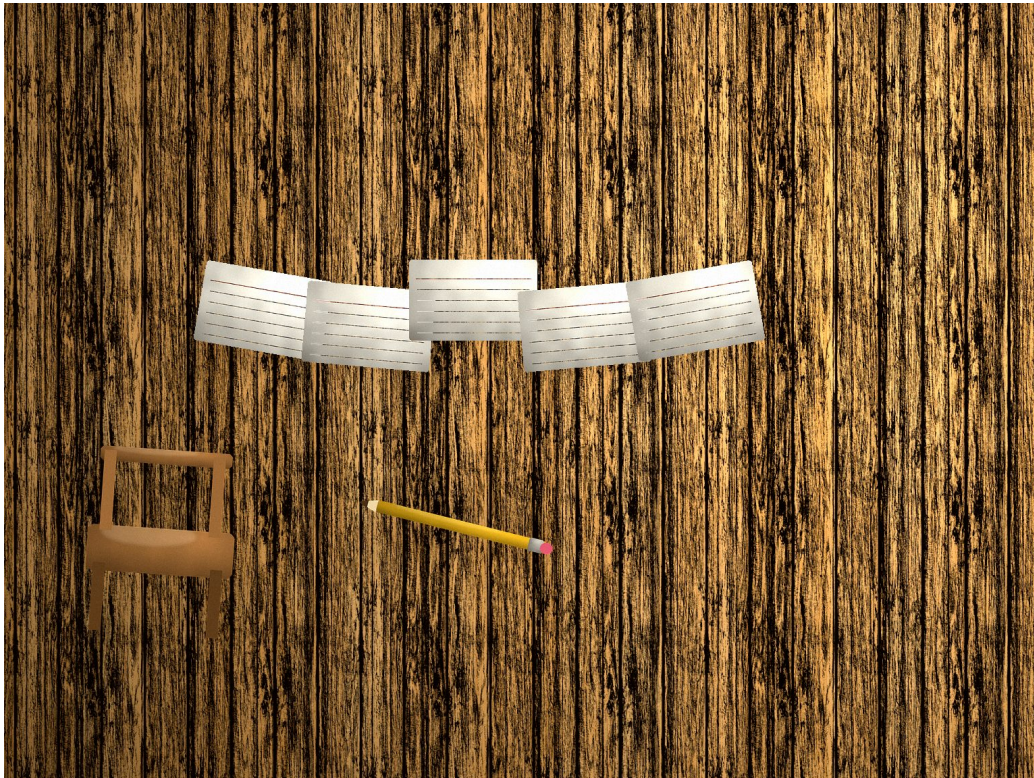


Figure 5: A kitchen-table still-life from a high three-quarter view: a small kitchen timer with no brand, a speech-shaped card with a question mark, a clear jar, a forked twig as a path that splits, and a magnifying glass. No people. No logos. No branded wheel.

Why this matters

What do you mean, *your turn*?

That is not a request for three reasons. It is not a costume of Socrates. It is one question, asked in a hallway you already own, about a word that two people are using as if it meant the same thing. Often it does not. One child means “I got here first.” The other means “you had it yesterday.” A third, quieter meaning is “I want it.” Meaning first. Argument second.

Chapter 1 gave you a sentence you can keep: deciding what to believe or do, with reasons, after a pause. This chapter gives you the teachable object at five to ten. It is not a general faculty you install. It is a small set of social-cognitive moves you can name, model, and practice on snacks, turns, walks, and a box already in the cart.

The five moves are:

1. **Wait.**
2. **What do you mean?**
3. **How do you know?**
4. **What else could be true?**
5. **How could we check?**

One good question beats five. If you stack them, the child starts guessing what you want. If you skip the wait, you skip the thought. In the English philosophy-for-children efficacy trial, observers already noted the practical version of that: when thinking time was skipped, children struggled to form interesting questions.⁴⁷ Skip the wait, skip the thought.

Implicit hope that “we value thinking” will not do. Improvement cannot be a matter of implicit expectation. That finding comes from a mixed-age research literature, not from a kindergarten trial. The principle still disciplines a kitchen. If you want the child to ask for a reason, you have to ask for a reason, often, out loud.⁴⁸

⁴⁷Stephen Gorard, Nadia Siddiqui, and Beng Huat See, *Philosophy for Children: Evaluation Report and Executive Summary* (London: Education Endowment Foundation, 2015), ERIC ED581147. Process evaluation: when thinking time was skipped, children struggled to form interesting questions. Efficacy trial, 48 schools; not a homeschool study. Access date for URLs in these notes: 1 September 2026.

⁴⁸Philip C. Abrami, Robert M. Bernard, Evgueni Borokhovski, Anne Wade, Michael A. Surkes,

Hearing a wrong reason, then asking a better question, then naming a better reason or a fact if needed, is teaching. “Never correct” is not this book’s rule, and it is not a finding. Silence in the face of a false reason leaves the child with the error. Hearing is not endorsing. Correcting the *reason* is not shutting the child down.

What this idea unlocks is the rest of the week. Without wait, the talk is a quiz. Without meaning, you argue with a word the child did not mean. Without how-do-you-know, a good story about *why* wears the clothes of a look. Without what-else, one picture freezes. Without a check, a fluent sentence stands in for the jar, the window, the side of the box.

You do not need to be a philosopher. You do need to close your mouth for a slow three, and to hear “because it’s fair” as a starting point, not a look.

This week you can learn the five openings, and how to close your mouth for a slow three. Today the child can answer one “how do you know?” after a wait, then name one way to check.

For the parent: understand it yourself

Many adults feel rusty around silence. Three seconds feels long. That is ordinary. Five minutes of this section, then the warm-up at the end, is enough for tomorrow. The child still does the talking.

Everyday picture. Two children, one swing. “It’s my turn.” You want to fix it. The fix that teaches is slower than the fix that ends the noise. Ask what they mean by *turn*. Then wait. Then, if you need a second move, ask how they know. Then look at one other thing: the bag on the seat, the clock, a sign. You may still decide. They still got to mean something, give a reason, and look. That is the activity, sitting inside a dispute you were going to have anyway.

A second everyday picture, at dinner. Someone says this sauce is *best*. *Best* for

Rana Tamim, and Dai Zhang, “Instructional Interventions Affecting Critical Thinking Skills and Dispositions: A Stage 1 Meta-Analysis,” *Review of Educational Research* 78, no. 4 (2008): 1102–1134. Improvement “cannot be a matter of implicit expectation”; immersion weakest; explicit objectives beat implicit hope. Mixed-age literature. Philip C. Abrami et al., “Strategies for Teaching Students to Think Critically: A Meta-Analysis,” *Review of Educational Research* 85, no. 2 (2015): 275–314. Combination of dialogue, authentic/anchored problems, and mentoring $g = 0.57$, 19 mixed-age studies, not kindergarten; elementary ages 6–10, $k = 49$, $g = 0.37$ on standardised critical-thinking tests, not kitchen talk.

whom? *Best* at what? The box will say it too, later, in a store. Clarify before you judge. “What do you mean, *best*?” is not a trap. It is the difference between arguing with a word and finding out which picture of the word is in the room.

Precise picture. The five moves are families, not a script you recite in order every time. Wait is the silence that makes the others audible. Meaning is sense-making before evaluation. How-do-you-know is the reason, and — later, more sharply — the difference between a story that makes an event *plausible* and a look that it *happened*. What-else is fallibilism without “anything goes.” How-could-we-check is a path from the sentence to a jar, a window, a side of a box, a page.

Wait has two research names. Keep them apart.

Mary Budd Rowe watched elementary *science* lessons. Teachers typically waited less than a second after a question, and about nine-tenths of a second after a student stopped. When both waits reached three to five seconds, children talked longer, offered more speculative sentences, compared more, and asked more. Students teachers had rated “slow” talked more.⁴⁹ That is science class, on tape. It is not a homeschool trial of critical thinking. The portable piece is the two waits: after you ask; after they stop.

Robert Stahl later called the silence *think-time*: uninterrupted quiet so the adult and the child can finish the thought. About three seconds is a convention, not a sacrament. Imprecise questions followed by long silence increase confusion. Wait after a *clear* question.⁵⁰ Stahl listed eight kinds of silence. You need three of them at a kitchen table: the pause after your question; the pause *inside* the child’s answer, so you do not cut them off; the pause after they stop, so a revision can still arrive. The others — teacher pause, task-completion time, a dramatic beat — are

⁴⁹Mary Budd Rowe, “Wait-Time and Rewards as Instructional Variables, Their Influence on Language, Logic, and Fate Control,” paper to the National Association for Research in Science Teaching, Chicago, April 1972, ERIC ED061103; journal form, *Journal of Research in Science Teaching* 11, no. 2 (1974): 81–94. Elementary science class; typical wait less than one second after a question and about 0.9 seconds after a student response; extending both to 3–5 seconds changes discourse (longer replies, more speculative talk, more child–child comparison, more questions from students rated “slow”). Not a homeschool trial and not a critical-thinking test.

⁵⁰Robert J. Stahl, “Using Think-Time and Wait-Time Skillfully in the Classroom,” ERIC Digest ED370885, 1994. Think-time: uninterrupted silence so teacher and students can complete thinking and oral responses; about three seconds as a convention, not a sacrament; eight categories of silence, including post-question wait, within-response pause (do not cut the child off), and post-response wait. Written for classroom teachers generally. Imprecise questions followed by long silence increase confusion.

classroom furniture. Steal the three. Leave the costume.

How-do-you-know is where Kuhn's mash walks in. Asked how they know a runner won, young children often point at the fancy sneakers — a good story about *why* someone might win — instead of the trophy in the last picture, which is how you know he *did*. Six-year-olds get this right most of the time and still miss. Adults in that study did not mash those two.⁵¹ Ordinary language at your table: "because the sneakers are fast" is a *why*. "because he's holding the trophy" is a *how*. Chapter 3 will keep those questions apart on purpose. This week you only need to hear the mash, and to have a trophy-shaped look in the room — a finish line, a count, a lid off a jar.

What-else is not relativism. A puddle on the path could be water, or a shadow, or a wet leaf. You can name more than one, then check if a check is cheap and safe. You do not have to pick a winner tonight. You also do not have to say every picture is as good as every other. Reasons can be better or worse. Context is Lipman's word for that sensitivity. "Anything goes" is not.

How-could-we-check is leave-this-sentence, scaled to a box. The front says *best*. The side has a list. Another box is on the shelf. The door of the shop is down the street. The window is right there. A fluent "because the box says so" is a starting point. It is not the look.

Whitehurst's picture-book prompts — prompt, evaluate, expand, repeat — are a literacy cousin. Evaluate is in the list. That is the opposite of "never correct." Those prompts move oral language in preschool. They are not a critical-thinking curriculum.⁵² Steal evaluate-and-expand as manners: hear the sentence, improve it, give it back. A literacy rating is not a rating of the five moves.

Wrong answers you should be able to hear

1. *A stacked quiz*. "What do you mean, and how do you know, and what else,

⁵¹Deanna Kuhn and Susan Pearsall, "Developmental Origins of Scientific Thinking," *Journal of Cognition and Development* 1 (2000): 113–129. Race / trophy sequence as in Chapter 1. Deanna Kuhn, "How Do People Know?," *Psychological Science* 12, no. 1 (2001): 1–8: young children have difficulty differentiating explanation of why a claim makes sense from evidence that the claim is true.

⁵²What Works Clearinghouse, *Dialogic Reading* (revised 8 February 2007): positive effects on oral language for ages 3–5 in centre-based settings; no discernible effects on phonological processing. Literacy outcome, not critical thinking. Whitehurst's PEER sequence includes evaluate and expand.

and how could we check?” in one breath. The child hunts for the adult’s answer. What it usually means: you were afraid of silence. What to say: pick one. Wait. The others can wait until the next sitting, or until this reason finishes.

2. “*Because it’s fair.*” / “*Because it’s my turn.*” / “*Because it’s best.*” A small word doing all the work. What it usually means: meaning was skipped. What to say: “What do you mean, *fair*?” Two pictures of the word, if you need them: fair as same amount; fair as taking turns. Then, if needed, “How do you know?”
3. *Sneakers where a trophy was asked for.* “He won because he has fast shoes.” “There are three because I want three.” “It will rain because I want a puddle.” A why or a wish wearing how-do-you-know clothes. What it usually means: the mash is in the room, which is ordinary at this age and not gone in adults. What to say: “That’s a reason it *might* have happened. How do you know it *did*?” Then look at the trophy, the jar, the sky.
4. *A performance of Socrates.* Five questions, a raised eyebrow, a child who has learned that the game is to guess. What it usually means: the adult is demonstrating thinking instead of making space for it. What to say: one authentic question. You do not already have the recitation answer. Then wait.
5. *Silence as a policy, or correction as a slam.* Either the false reason stands forever, or the child is crushed for offering it. What it usually means: the folk rule “never correct,” or its opposite, a courtroom. What to say: “I hear that. I’m not sure that reason works, because... What else could be true?” Then, if needed, name a fact or do the look. Hearing, better question, named fact. In that order.

A sixth you will also hear: wait-time of zero, then you fill the gap with the right answer, then you ask why they never talk. The treatment is your mouth, closed, for a slow three, twice.

Five-minute parent warm-up

Do this before the lesson, with a scrap of paper, no child in the room.

Minute 1. Write the five moves. Say them out loud. Notice that wait has no question mark. It is the silence that holds the others.

Minute 2. Write today's opening: "What do you mean, *your turn*?" Under it, one follow-up you will actually use, not four. Count a slow three. That silence is the lesson.

Minute 3. Write a sneakers sentence: "He won because the shoes are fast." Write the trophy sentence: "He won because he's holding the cup." Say which one answers *how do you know he won?*

Minute 4. Imagine the child saying "because it's fair." Decide, without performing, what a stacked quiz would do. Decide what "what do you mean, *fair*?" would do instead.

Minute 5. Practice the wait with the empty chair. Ask the opening. Close your mouth. Look at the scrap, not at where the face will be. Put the pencil down.

If those five minutes are fluent for you, you can hear a stacked question, a small word doing too much, and a why offered as a how. That is the job.

How to teach it this week

Run the thinking hour from the front of this book. This chapter fills it with the five moves. Warm-up. Short model. Student attempt. One good question, then wait. If the reason is wrong: hear it, ask a better question, then a look or a named fact. Last thoughts: you may change your mind. Stop.

Warm-up (2–3 minutes, unaided). Yesterday's claim in one question. "What did you mean by *left* last time?" No device. No list of five.

Short model (3–5 minutes). You pick *one* move to make audible. Think aloud in two lines: "I am going to ask what you mean, then I am going to wait." Ask. Wait. Stop. You are showing the pause, not delivering a lecture titled *The Five Moves*.

Student attempt (5–10 minutes). The child talks. You wait. Struggle before rescue: ask, wait, hint, then a short model on *your* scrap, not as their reason.

One good question. Not "give me three reasons." One of: "What do you mean, *your turn*?" "How do you know?" "What else could be true?" "How could we check?" Wait is the move you do not say. You do it.

Talk (3–5 minutes). One spoken sentence. Five-to-seven: talk, not an essay. Eight-to-ten may write one line that names the old view and the new one after a

look.

Stop. While they still have a question left in them. A second sitting later in the week beats a five-question pile-up.

Exact wording you can say

On meaning:

“What do you mean, *your turn*?”

“What do you mean, *best*?”

“What do you mean, *closed*?”

“Which part?”

On reason:

“How do you know?”

“What makes you think that?”

“Did you see, or did someone tell you, or do you hope so?”

On alternatives:

“What else could be true?”

“What else could it be?”

On a check:

“How could we check?”

“What could we look at?”

When the reason is wrong:

“I hear that. I’m not sure that reason works, because... What else could be true?”

Then, if needed: the look, or a named fact.

When you are about to take over:

“I’ll wait.”

Then wait. After you ask, a slow three. After they stop, wait again. If they are mid-reason, do not cut them off. Look at the object, the book, or the window, not at the child, if the silence is hard.

Age-band moves: 5–7 / 8–10

5–7. One question per sitting is plenty. Wait is the adult's work; do not mock slowness. Meaning lives in small words they already use: *turn*, *best*, *left*, *fair*, *closed*. How-do-you-know is often a look they can point at. What-else is two pictures, not a debate club: puddle or shadow. Check is near: open the jar, look out the window, turn the box. Speech is talk. You write the caption if writing fights the sitting.

8–10. Same five moves. They can hold a small word across two contexts: *fair* at the swing and *fair* about splitting a snack. They can hear sneakers versus trophy when you keep the questions apart. What-else can include a third picture. Check can include a label on the side, a sign, a second page. Wait can include writing one line. They will still mash a fluent sentence with a look, some days. They will still guess what you want if you stack questions. There is no diploma in this band.

Not a stable skill at either band: unaided far transfer of the five moves into an unfamiliar domain; five questions at once as “rigour”; wait as a proven engine of a thinking-test score. The moves make already-present reasoning more audible. They do not install a gym.

First try-it for the student

A real dispute, or a small word already in the room, no vocabulary card:

someone has said *your turn*, or *best*, or *three*.

Say: “What do you mean, *your turn*?”

Wait. If they stare, the question may have been vague, or wait-time after it was zero. Ask a smaller one: “Do you mean you got here first, or that you want it?” Wait again. If they offer a wish, hear it, then “how do you know?” If they offer sneakers, ask for a trophy-shaped look. If they stack their own speech with no reason, “what are we going by?”

Later the same week, the diagnostic item:

the same small word, a different object — *turn* at the swing, then *turn* about whose job it is to put the lid on.

If they use the word as if it meant the same thing both times, ask whether this object is a turn-taking object. Homework is not. The swing might be. That is Lipman's context, in ordinary language.⁵³

How to fade help. First sitting: you ask, you wait, you hint with two pictures of the word. Second: they answer after the wait, you take the next move only if needed. Third: they ask *you* what you mean, or how you know — a gift, not a requirement. Fourth: a cousin of the same move on a walk or at a store, with no lesson voice.

When to stop talking. When you hear a second question leave your mouth before they finished the first. When you are performing a method. When the sit has become a fight. One good question. Then wait. Then stop.

Practice that actually builds learning

Blocked, for a new move. The day you introduce wait, that is the whole trick: ask, close your mouth, look at the object. The day you introduce meaning, only one small word. Mixing five new moves in one sitting makes the child hunt for the “right” school move instead of thinking.

Mixed, for when to use it. Later the same week, meaning reappears next to how-do-you-know and a check. Mixing is the practice of choosing: is this a word that needs clarifying, a reason that needs a look, or a sentence that needs an alternative? You impose that mix on the week you already have.

One incorrect example to diagnose. A fluent sentence with no check: “Because it's fair.” Or a why offered as a how: “He finished first because his shoes are fast,” while the trophy is in the picture. Hear it. Better question. Then the look. One follow-up is enough on the first miss.

These are illustrations, not reported families.

⁵³Matthew Lipman, “Critical Thinking—What Can It Be?,” *Educational Leadership* 46, no. 1 (1988): 38–43. Criteria, self-correction, context; turns appropriate in some situations and dubious in others (homework is not a turn-taking object). Aims, not trial evidence.

Named try-it: Wait drill (in-home, invisible)

Time. No extra minutes. It rides inside a question you were already going to ask.

Materials. None. A kitchen, a sofa, a hallway. Your mouth.

Safety. Skip mocking slowness. Skip a stare-down. Look at the object if the silence is hard.

The fun. The adult's mouth stays shut. The child notices, over days, that there is room.

The skill. Rowe's two waits — after the question, after they stop — labelled as science-class origin. Stahl's within-response pause: do not cut the child off mid-reason. Think-time, not a trial you are replicating.

How: ask one question. Count a slow three. If they are still finding the word, wait more. After they stop, count three again before you evaluate, recast, or pile on. If they never start, a hint is allowed: "look at the jar." The finished answer is not a hint.

You will fail this drill at dinner, at first. That is ordinary. The next question is another chance. There is no sticker for waiting.

Named try-it: Meaning of a small word (in-home)

Time. Three to five minutes at dinner, or whenever the word actually arrives. Skip interrogating chewing.

Materials. Food already there, or a toy already in dispute. The word in the air: *turn, best, closed, fair, left, same.*

Safety. Curious, not courtroom. No using the word as a trap about manners.

The fun. Two pictures of the same small word. Being the person who notices they are not the same picture.

The skill. Clarify before you judge. "What do you mean, *best*?" Ennis's clarifying questions in ordinary clothes.⁵⁴

⁵⁴Robert H. Ennis, "An Outline of Goals for a Critical Thinking Curriculum and Its Assessment," criticalthinking.net, revised 18 October 2000. Clarifying questions: Why? What do you mean

Say: “What do you mean, *best*?” If they stare, offer two pictures, not a lecture: best at crunching, or best because the box said so, or best because you like it. Wait. Then, if you need a second move: “How do you know?” Stop. You will not run all five on the potatoes.

Named try-it: Trophy versus sneakers (in-home)

Time. Five to ten minutes on the floor.

Materials. A race the child can see: toy cars, running to the door, a stacking tower, a board game with a clear finish. A visible marker that someone *did* finish — a cup, a tape line, a last block — and a plausible *why* (the fast car, the “good” sneakers, the tallest tower-builder).

Safety. No throwing at faces. No humiliation of the child who did not finish. The point is the question, not the ranking.

The fun. Who finished. Being a detective of *that* versus *why*.

The skill. How-do-you-know, not why-might-that-be. Kuhn’s distinction in ordinary language. The trophy is the look. The sneakers are a story that makes winning plausible. Six-year-olds get this right most of the time and still miss. You will hear the mash at eight and at forty, in other rooms.

Say: “How do you know she finished?” Wait. If they say “because her car is fast,” hear the sneakers. Say: “That’s a reason she *might* have. How do you know she *did*?” Point at the tape, the cup, the last block. Later, separately — not in the same breath — you may ask why she might have finished. Chapter 3 will spend that separation. This week, keep them apart if you can.

by...? What would be an example? What would not be an example? The outline does not specify grade level.

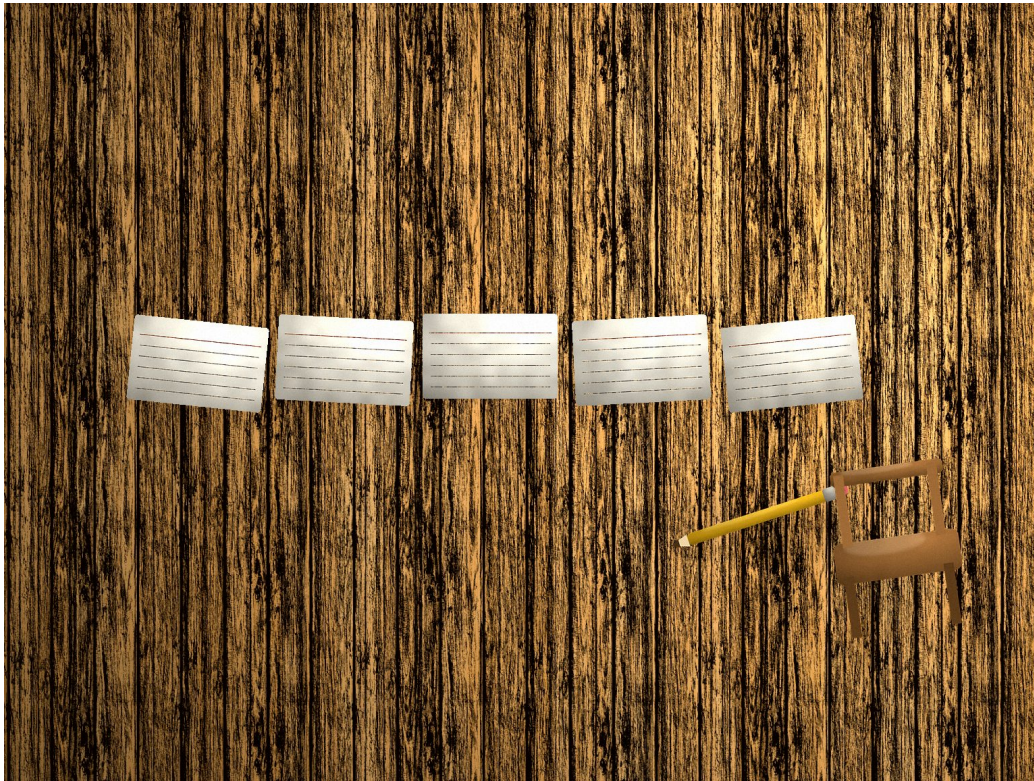


Figure 6: Five small still-life objects in a row on a table: a kitchen timer, a question-mark card, a jar, a twig that splits, a magnifying glass. Not a branded wheel. No people. No logos.

Named try-it: What-else on a walk (out-of-home)

Time. Five minutes of a walk you were taking anyway.

Materials. Eyes. Optional: a notebook mark.

Safety. Roads. Water. Other people's dogs. Unknown plants stay as looking, not tasting. Noticing is not foraging school. No lecture to a stranger's child.

The fun. "It could be a puddle or a shadow." Stopping.

The skill. Alternatives without relativism. More than one picture, then a cheap check if there is one. You do not have to pick a winner tonight.

Say: “What do you notice?” Then: “What else could it be?” If they freeze, offer one other picture and wait. If they say anything goes, bring back a check: “How could we tell?” Look closer, look from the other side of the path, come back after a cloud moves. A parent walk is not a forest-school programme, and this book does not treat it as one.⁵⁵

Named try-it: Store-label check (out-of-home)

Time. Three to eight minutes in a shop you were already in.

Materials. One package. One. Not a cart audit.

Safety. Aisle courtesy. Hands on the box you will buy or put back. No lecture to strangers. No tasting from an open demo. No shoplifting a “test.” No sermon about what people should eat. Body talk stays out.

The fun. Turning the box. The front and the side are different speakers.

The skill. Leave the front; look at the side. What does this package *say*? What does that word mean? What is missing? How could we check? The box is a speaker. Speakers can be incomplete.

Safe examples: two boxes with different serving sizes; a “serves 4” tin that is clearly small; a picture of fruit on the front and a flavour word on the side. Not a food-policy fight.

Say: “What do you mean, *best*?” or “What does this word say?” Then: “How could we check?” Turn the box. Look at another box if it is kind to the aisle. Repeat the check — the side, the other box — not the rumor-word in a singsong.

In-home cousin, three to eight minutes: the same move on a box already on the counter. Chapter 5 will spend the kitchen. This week, one turn of one box is enough.

⁵⁵A parent walk is looking practice. Forest School is not used here as a critical-thinking trial. See the outside-the-home chapter for the fuller caution.

Talk box

This is an illustration, not a reported family. Two people want the same swing. The parent has not announced a method.

Opening question

“What do you mean, *your turn*?”

Not: “Give me three reasons.”

Follow-ups (pick three to five; you will not use all of them every sitting)

1. How do you know?
2. What else could be true?
3. How could we check?
4. What are we going by?
5. You may change your mind. That is not losing.

How to wait

Ask. Count a slow three. Look at the swing, the bag, the sign — not at the child’s face — if the silence is hard. After they stop, wait again. If they are mid-reason, do not cut them off. Rowe’s two waits are science class. Stahl’s think-time is the later classroom name. Use the pause. Neither is a homeschool trial.

What a stuck silence usually means

The questions were stacked. Or they are guessing the adult’s answer. Or they offered a wish where a look was asked for. Or wait-time after the question was zero. Or the question was vague. Or they are searching for a word. Or the question was a recitation item in disguise. Next move: one smaller question, wait, point at the object. “Do you mean you got here first, or that you want it?” is a hint. The finished ruling is not a hint; it is the grab. If the sitting becomes a fight, stop. Postpone. Pick a smaller claim. Done enough this week: one answered meaning, or one how-do-you-know after a wait, plus one named check.

For the student

This page is for you.

There are five moves. They are small. You already use some of them. This week we name them so you can find them on purpose.

Wait. After a question, you may take time. After you talk, you may take time again. Nobody is slow for thinking.

What do you mean? A word can have more than one picture. *Turn. Best. Fair.* Ask which picture.

How do you know? A reason. Not only a wish. Not only a good story about why.

What else could be true? One more picture. You do not have to pick a winner every time. You also do not have to say every picture is as good as every other.

How could we check? Leave the sentence. Look at one other thing.

A tiny worked example

Someone says, “It’s my turn.”

You ask — or your grown-up asks — “What do you mean, *your turn*?”

Then there is a wait.

Maybe you mean you got there first. Maybe you mean you want it. Those are different.

Then: “How do you know?”

Then you look: a bag on the seat, a clock, a sign.

You may change your mind. That is not losing.

Two tries

1. At home, pick one small word already in the room — *turn, best, left, fair*. Say what you mean. Then say how you know. Then name one way to check. Wait is allowed in between.
2. On a walk, stop at one thing. Name it. Name one other thing it could be. If a check is easy and safe, do the check. If not, you may leave it as two pictures.

Write nothing if writing fights the sitting. Talk the sentence. If you are older and writing is easy, you may write: “I mean . ***I know because*** . We could check by ____.” Fill your own blanks. A sentence a machine filled in is not your reason.

Explain it back

Tell someone at the table the five moves, in your own words, with a jar or a swing in the sentence. Then point at a finish — a tape, a cup, a last block — and say how you know someone finished, not why they might have. Then say one time you changed your mind after a look.

Challenge

Some people ask five questions in a row and never wait. Some people say “because it’s fair” and stop. Some people say the fast shoes when you asked how they know who won. What would those three moves mean? How do you wait? How do you ask what a small word means? How do you look at the trophy instead of the shoes?

You are allowed to struggle. You may use a swing, a box, a puddle, a race on the floor. You talk. You look. If you get stuck, ask for a hint — not the finished ruling. Then try again.

A fluent sentence is not a check. You are allowed to wait. You may change your mind when you look.

If it isn’t clicking

Three diagnostics. Each one has a next move. None of them is a verdict on talent, and none of them is a reason to wait for a birthday.

1. Wait-time after the question is still zero, or the child has learned that you will fill the gap.

The silence is a wall because it was never a real silence. Next move: the invisible wait drill only, for a stretch of sittings. One question. Look at the object. Count three twice. If you hear yourself answering, you have started doing the work. A stacked quiz is the same diagnosis in a costume. Put four of the five moves back in the folder. If this is still the bottleneck after a couple of weeks of short daily waits, stay here. Meaning and check will not hold on top of a child who is waiting *you* out. A human who will sit with a jar and wait, not a tablet that fills the quiet, is a reasonable next step if the hour has become a fight.

2. Small words do all the work, or sneakers keep answering a trophy question.

“Because it’s fair.” “Because it’s best.” “Because the shoes are fast.” Meaning

was skipped, or how and why collapsed. Next move: two pictures of one word, then stop. Or one race with a visible finish and a plausible why, and only “how do you know she finished?” If they still mash, name the mash kindly: “that’s a why; I asked how we know.” Point. Chapter 3 will spend the separation. Do not jump to a store-label sitting until a small word can mean two things at dinner. Go ahead once they can clarify *turn* or *best* and point at a trophy-shaped look after a wait. A tutor is useful if the mash remains the whole hour after a couple of weeks of daily small-word work *and* the sitting is a fight.

3. The child guesses what you want, performs a fight, or talks forever with no reason.

The game has become “find the adult’s answer,” or “win,” or a stream with no “what are we going by?” Next move: shorter sits, one authentic question you do not already have the sentence for, wait twice. If they guess, wait after they stop and ask “what do *you* think?” If they talk forever, “what are we going by?” If the session becomes a fight, stop, postpone, pick a smaller claim. Praise is for a named look, not for the trait “critical thinker.” If the hour has become a fight after a stretch of daily short sits, a human who will wait, not a chatbot that supplies a fluent reason, is the release valve.

When to slow down. Stacked questions. Wait of zero. Small words still opaque. Sneakers still wearing trophy clothes. Sits so long that talk never starts. Those are brakes. “Not ready” because of age is the brake this book will not use. “Not ready” because silence and meaning have not yet been practiced is a real brake.

When to go ahead. A wait of a slow three has happened twice in one sitting without a grab. A small word has had two pictures. A how-do-you-know has landed on a look, not only a why. A walk has had one what-else. A box has been turned. Short sits are ordinary. Then Chapter 3’s “something to think about” has somewhere to sit. Being quick with words is not a reason to skip the wait.

When to get a human tutor. You have run the wait drill, or the small-word sitting, or the trophy-versus-sneakers race, for a stretch of daily sittings, and the same diagnosis is still the one in the room, and the hour has become a fight. A tutor is a release valve, not a failure of the sitting. Keep yourself as the person who can still hear a stacked quiz and a wish-as-reason. Outsourcing the hearing is the thing to avoid, not asking for help.

Tools, including AI

Optional helpers for you, the adult. The full rules live in the thinking-hour box in the front of this book. This chapter is a pointer, not a second policy paper.

The child talks and looks first. You hold the question and the wait. A tool may explain today's move *to you*, suggest extra questions you then vet (throw out any that import a live fight, a secret, or a pretend expert), write a short script for *you* to say after the child has tried, offer a hint after an attempt, or help you diagnose a reason the child already gave.

Leave these out of the hour: an unsupervised chatbot as the only partner; a tool that writes the child's reason; a pretend "fair-swing professor"; a detector score; a certificate of thinking; a tool asked to invent who was at the park. Ages five to ten are scripts and parent-child talk, not live open chat.

A fluent five-move paragraph from a machine is performance, not the child's check. If the tool produces the reason, the child is a spectator. Point back at the hour: the child talks to you.

A timer with no lesson voice, a jar, a box, and a walk are tools too. Use them, then fade them. The wait drill needs no device.

What "done enough" looks like

Placement is by skill, not birthday. A child who still lives in naming a wish versus a look is still in the five-to-seven band of this chapter, whatever their age. A child who can hold "what she thinks he thinks" in a known story, and still stacks five questions as a performance, is not done with wait. A publisher's "grade 2 critical thinking workbook" is a scope, not a legal grade, and not a transcript line. The record is a notebook of questions. The title a stranger can read is still Reading, or Science.

Checklist before moving on

- You can name the five moves without looking: wait; what do you mean; how do you know; what else could be true; how could we check.
- You can close your mouth for a slow three after a question, and again after they stop, without mocking slowness.

- You can hear a stacked quiz, a small word doing too much, and sneakers answering a trophy question.
- The child has answered one meaning question about *turn*, *best*, *fair*, or *closed*, after a wait.
- The child has answered one how-do-you-know with a look, not only a why or a wish.
- At least one what-else has happened on a walk or at a window: two pictures, not a fight.
- At least one box has been turned, at a store or on the counter, without a food sermon.
- One good question has beaten five, in an actual sitting.
- A wrong reason has been heard, then improved, without crushing the talk and without leaving the error standing.
- Sits can be short. You did not require a method poster or a diploma sentence.

If most of that list is true, go on to something to think about — a picture, an object, a walk — even if the birthday says otherwise. If the birthday says “third grade” and the wait is still zero, stay. The next chapter puts knowledge on the table so the five moves have something to bite.

A path through ordinary challenges is the promise. A diploma is not.

Chapter 3

Something to think about

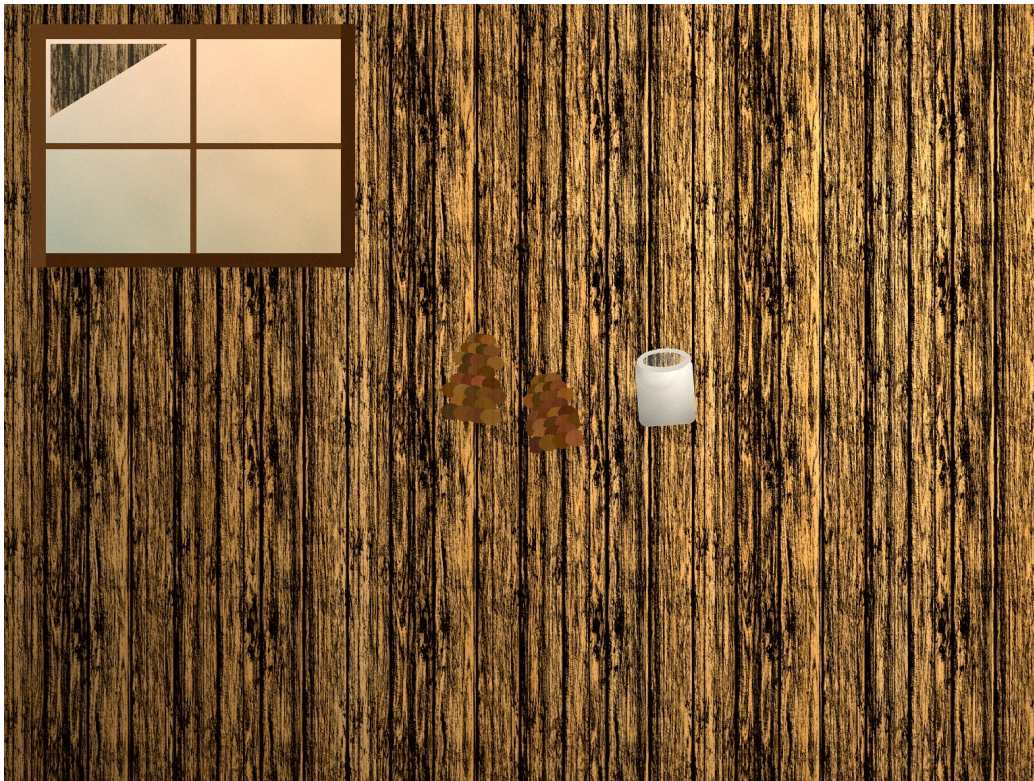


Figure 7: A table still-life from a high three-quarter view: a pictured race as objects (a small cup trophy and a pair of sneakers), a kitchen gadget such as a whisk, and a puddle seen from above on a dark path. No people. No logos.

Why this matters

How do you know it happened?

Then, later, separately: Why might it have happened?

Those are not the same question. They feel the same in the mouth. They are not the same in the mind. The first asks for a look — a trophy in a picture, a wet sleeve, a bike that is or is not in the garage. The second asks for a story that would make the event plausible — fast sneakers, a puddle, a sibling who wanted a ride. Children mash them. Adults mash them too, in other rooms. This chapter keeps them apart on purpose.⁵⁶

Chapter 2 named five moves. Moves without something to think about will not implement. Daniel Willingham’s constraint is the design rule for this week: you can teach a maxim about how to think; without background knowledge and practice, the child probably cannot put the maxim to work.⁵⁷ “Look from more than one side” is empty if they do not know much about the thing on the table. The content this week is a picture, an object, a walk — domains the child already somewhat knows. Not a news cycle. Not a science year.

This is not a science book. The National Research Council’s *Taking Science to School* is used here for one household fact about children: they already know a great deal. The picture of the concrete, simplistic child is outmoded. Prior ideas are real, and they are not emptiness. A child who says something false about a puddle or a whisk is often applying an idea they already have, not displaying an absence of thought.⁵⁸ We borrow that fact. We do not start DNA. We do not hang

⁵⁶Deanna Kuhn and Susan Pearsall, “Developmental Origins of Scientific Thinking,” *Journal of Cognition and Development* 1 (2000): 113–129. Between about 4 and 6, children often confuse a theory that makes an event plausible with evidence that the event occurred; six-year-olds distinguish most of the time and still miss; the distinction remains limited in sense and context. Deanna Kuhn, “How Do People Know?,” *Psychological Science* 12, no. 1 (2001): 1–8. Access date for URLs in these notes: 1 September 2026.

⁵⁷Daniel T. Willingham, “Critical Thinking: Why Is It So Hard to Teach?,” *American Educator* (Summer 2007). You can teach maxims about how students ought to think, but without background knowledge and practice they probably will not implement the advice. Daniel T. Willingham, “How to Teach Critical Thinking,” NSW Department of Education occasional paper (2019): content knowledge is crucial; generic programmes have had limited success.

⁵⁸National Research Council, *Taking Science to School: Learning and Teaching Science in Grades K–8*, ed. Richard A. Duschl, Heidi A. Schweingruber, and Andrew W. Shouse (Washington, DC: National Academies Press, 2007), Executive Summary and Chapter 3. Children enter school with substantial knowledge; the concrete-and-simplistic-thinker view is outmoded; naïve

a method poster. A kitchen fair test — change one thing, look — lives mainly in Chapter 5. This chapter owns the *something*: the stimulus, and the knowledge the stimulus needs.

What this idea unlocks is every later sitting. Without a thing on the table, “how do you know” becomes a personality quiz. Without keeping how and why apart, a good story wins. Without noticing who was in a position to know, volume of voice wins. Knowledge first, scaled to a picture, a whisk, a puddle, a garage.

You do not need to be a scientist. You do need to hear a maxim die when there is nothing on the table, and to hear “because the sneakers are fast” as a why when you asked how.

This week you can learn how a maxim dies without a thing on the table, and how to keep “how do you know” from collapsing into “why might it be.” Today the child can look at one object or one picture, answer how they know, then — separately — why it might be.

For the parent: understand it yourself

Many adults feel rusty around the word *knowledge* when the child is five. That is ordinary. Knowledge here is not a syllabus. It is what the child already somewhat knows: this kitchen, this path, this picture, this bike. Five minutes of this section, then the warm-up at the end, is enough for tomorrow. The child still does the talking.

Everyday picture. Two pictures of a spill on a table. In the last picture, a glass is on its side and there is a puddle. You ask, first, “How do you know it spilled?” The look is the puddle, the glass on its side, the wet. Then you wait. Then, later, not in the same breath, “Why might it have spilled?” Now a story is allowed: a sleeve, a cat, a bump. If the child answers the first question with the sleeve, they gave you a why. Hear it. Point at the puddle. The sleeve can wait.

A second everyday picture, in the kitchen. A whisk. If the child does not know what it is for, “how do you know it mixes” is an unfair question. Teach the bit you need — “this is for mixing” — then ask how we know it was used: batter on the wires, a bowl beside it. Knowledge first. Then the move.

understandings can be built on and can also contradict later explanations. Used here for children’s capabilities, not as a science scope-and-sequence. doi:10.17226/11625.

Precise picture. Write two columns on a scrap: *How do we know it happened?* and *Why might it have happened?* The first column is evidence that an event occurred. The second is a theory that makes the event plausible. Kuhn and Pearsall's race is the precise picture you already met: sneakers in column two, trophy in column one. Four-year-olds often put sneakers in column one. Six-year-olds get column one right most of the time and still miss. The distinction remains limited in sense and context. They are not being asked, in that study, for a full causal experiment about *why*. More complex confusions stay common in older children and in adults.⁵⁹ A good trophy sitting is not scientific method.

Willingham's analog is the second precise mark, and it is not a kindergarten study. Students solved a garden problem. Minutes later they met a band-marching problem with the same deep structure. Few — just 19 percent — saw the analog. A hint that the new problem was like the earlier one raised solution only to 35 percent.⁶⁰ Surface captures attention. Deep structure is visible only after knowledge and practice, and even then a hint often still has to name the cousin. You will cue “this is like the jar” more than once. A successfully coached near analog is not evidence that a general faculty has been installed. Near is not far. This book does not print older analog-percentages from other papers as if they were kitchen results.

Ground rules for talk are portable manners, not a thinking inventory. From classroom work with nine- and ten-year-olds on exploratory talk, a family can steal four lines without stealing a test-score promise: we listen; we give reasons; we can change our minds; we ask.⁶¹ Accountable talk, in the classroom language, has three accountabilities: to the people in the room, to reasoning, and to *knowledge* — to what is so.⁶² The third is the one kitchen slogans drop. You are accountable

⁵⁹Kuhn and Pearsall, “Developmental Origins of Scientific Thinking” (2000): six-year-olds who distinguish theory and evidence still do so in only a limited sense and set of contexts; they are not being asked for covariation evidence that would support a causal theory of *why*; more complex confusions remain common later. Adults in the trophy study did not mash how and why on that task; adults still replace evidence with a good story in other rooms (Kuhn 2001).

⁶⁰Willingham, “Critical Thinking” (2007): band-marching word problem isomorphic to a garden / least-common-multiple problem solved minutes earlier; few subjects — just 19 percent — saw the analog; a hint raised solution only to 35 percent. Not a kindergarten study; used here as surface capture. Page-level percentages from Gick and Holyoak (1980) are not used as load-bearing numbers in this chapter.

⁶¹Neil Mercer, Rupert Wegerif, and Lyn Dawes, “Children's Talk and the Development of Reasoning in the Classroom,” *British Educational Research Journal* 25, no. 1 (1999): 95–111. Exploratory-talk ground rules with ages 9–10 in classrooms. Portable manners (listen, give reasons, change minds), not a promise of test gains to a parent of a five-year-old.

⁶²Sarah Michaels, Catherine O'Connor, and Lauren B. Resnick, “Deliberative Discourse Ideal-

to the puddle, not only to taking turns speaking about it. Posting four lines on a fridge is not practice. Practice is the next picture.

A fair test — change one thing, keep the rest the same, look — is a *check type*. It is scientific reasoning, with its own evidence, and it belongs in the kitchen chapter. This week, if a check is cheap, do a look. Leave the year of experiments for the kitchen chapter.⁶³

Just wondering is not enough. Wonder without knowledge is a maxim with nothing to bite. A museum can be a thinking hour if you pick **one** object, one label, one question. It is not a franchise. It is not this chapter's try-it. A walk you were taking anyway is.

Wrong answers you should be able to hear

1. *How and why collapse*. “How do you know it spilled?” “Because the cat is naughty.” A story in the how-column. What it usually means: the mash is in the room, which is ordinary. What to say: “That’s a why. How do you know it *did* spill?” Point at the puddle. Later, separately, you may ask why.
2. *A maxim with no object*. “Let’s think critically about this.” Nothing on the table. Or an object the child does not know at all, and no bit of teaching first. What it usually means: coverage of a method won. What to say: put a whisk, a picture, or a puddle down. Teach the bit they need. Then ask.
3. *Volume of voice as knowledge*. The loudest person was in the kitchen, so they must know where the bike is. What it usually means: source was skipped. What to say: “Who saw?” Who was in a position to know is not the same as who is sure. Take a previously accurate speaker seriously. Still look in the garage if a look is cheap.
4. “*Anything could be true, so we stop.*” What-else without a check, frozen as relativism. What it usually means: alternatives were treated as a truce.

ized and Realized: Accountable Talk in the Classroom and in Civic Life,” *Studies in Philosophy and Education* 27 (2008): 283–297. Three accountabilities: community, reasoning, knowledge. Classroom design language, not a kitchen-table trial.

⁶³Zhe Chen and David Klahr, “All Other Things Being Equal: Acquisition and Transfer of the Control of Variables Strategy,” *Child Development* 70, no. 5 (1999): 1098–1120. Ages 7–10; scientific reasoning, not generic critical thinking. Pointer only; kitchen fair tests live in Chapter 5. Martin Schwichow, Christoph Croker, Corinne Zimmerman, Ute Höffler, and Hendrik Härtig, “Teaching the Control-of-Variables Strategy: A Meta-Analysis,” *Developmental Review* 39 (2016): 37–63, mean $g = 0.61$ after excluding outliers, is the same scientific-reasoning literature.

What to say: “What else could it be? How could we tell?” Reasons can be better or worse. You are accountable to what is so.

5. *A science year in disguise.* DNA, a method poster, a fair-test lecture, because a science book was opened for the “children already know” sentence. What it usually means: the wrong book arrived. What to say: this is a picture, an object, a walk. The ice cubes can wait for Chapter 5.

A sixth you will also hear: “this is like last time” said by you, once, as if the hint installed transfer. Cue the cousin. A coached analog is not a general faculty.

Five-minute parent warm-up

Do this before the lesson, with one picture or one object and a scrap of paper, no child in the room.

Minute 1. Put the thing on the table. Name the bit of knowledge the child will need. If you cannot name it, this is not yet a thinking sitting. Teach the bit first, or pick a more known thing.

Minute 2. Write the two questions on the scrap, on two lines, with a gap between them: “How do you know it happened?” Then a blank line. Then “Why might it have happened?” The gap is the lesson.

Minute 3. Fill column one for your object (the look). Fill column two (a plausible why). Practice hearing a column-two answer to a column-one question.

Minute 4. Imagine the child does not know what the object is for. Decide what a maxim would do. Decide what one sentence of teaching, then a look, would do instead.

Minute 5. Write the sentence you will actually say first. Only the how. Put the pencil down. The why waits.

If those five minutes are fluent for you, you can hear a mash, a maxim with no object, and a loud voice standing in for a look. That is the job.

How to teach it this week

Run the thinking hour from the front of this book. This chapter fills it with a something. Warm-up on a known thing. Short model of the two questions, kept

apart. Student looking and talking. One good question, then wait. If how and why collapse, hear it, point at the look, save why for later. Stop.

Warm-up (2–3 minutes, unaided). Yesterday’s object or picture. “How did we know?” No why yet. No device.

Short model (3–5 minutes). One pictured event, or one object. You answer how *you* know, in two lines, pointing. Then you stop. The why, if it comes, comes after a wait and a change of question, not as a repair of the first silence.

Student attempt (5–12 minutes). The child looks. The child talks. You wait. Struggle before rescue: ask, wait, hint (“point at the wet”), then a short model on *your* scrap.

One good question. Not “what is evidence?” First: “How do you know it happened?” Later, separately: “Why might it have happened?” If you only have room for one, take how.

Talk (3–5 minutes). One spoken sentence that points. Five-to-seven: talk. Eight-to-ten may write two labelled lines: *How I know* and, underneath, *Why it might be*.

Stop. While they still have a look left. Two questions in two sittings beat two questions mashed in one.

Exact wording you can say

On how:

“How do you know it happened?”

“What did you see?”

“What were you told?”

“What do you hope? Can those be different?”

On why, later:

“Why might it have happened?”

“That’s a why. I still want how we know it *did*.”

On an object:

“What is it for?” If they do not know, teach the bit. Then: “How do we know it was used?”

On a walk:

“What do you notice?”

“How do you know it’s a...?”

“What else could it be?”

“How could we check?”

On source:

“Who saw?”

“Who was in a position to know?”

When you are about to mash the questions yourself:

“We’ll ask why in a minute. How do we know first.”

Then wait. Slow three after you ask. Slow three after they stop. Look at the picture, the whisk, the puddle, not at the child, if the silence is hard. Stahl’s think-time, classroom-origin. Rowe’s waits were science class. Use the pause.

Age-band moves: 5–7 / 8–10

5–7. The something is near and known: a picture of a spill, a whisk, a puddle, a bike in a garage. How is a point. Why is a story you save for a second sitting if the mash is thick. Who-saw is first-order: I saw; you were in the other room. Speech is talk. Determinate looks (the puddle is there) are easier than knowing when you *cannot* tell yet. If they cannot tell, “I’m not sure yet” is allowed.

8–10. Same two questions, labelled out loud if that helps. They can write the two lines. They can hold who-was-in-a-position-to-know when two people were in different rooms. They can apply “how do you know it’s a...?” across a walk. They still mash, some days. They still need the bit of knowledge first on a new gadget. They still need you to cue “this is like the spill picture.” Second-order — what she thinks he thinks about where the bike is — can wait for a story they know, under a prompt. It is not this week’s requirement.

Not a stable skill at either band: unaided far transfer from a coached analog; unprompted coordination of a causal theory with covariation evidence; a museum as

a thinking diploma. Same moves. Different grain.

First try-it for the student

One pictured event, no vocabulary card:

a race, a spill, a finished cake — something that happened, with a look in the last picture and a plausible why somewhere in the pictures.

Say: “How do you know it happened?”

Wait. If they name the sneakers, the sleeve, the “good baker,” they gave you a why. Hear it. Point at the trophy, the puddle, the missing slice. “That’s a why. How do you know it *did*?” If they point at the look, they answered how. Then stop, or — later the same week, a different sitting — ask why it might have happened.

Later the same week, the diagnostic item:

the same pictures, but you ask why first, on purpose, then how.

If they can keep the answers from collapsing even when you reverse the order, the distinction is starting to travel. If they cannot, how-first is still the sitting. That is not a verdict on age.

How to fade help. First sitting: you point at the look, you say how you know, they echo. Second: they point, you wait, you hint (“the last picture”). Third: they answer how without the why leaking in. Fourth: a cousin — an object, a walk — with the same two questions.

When to stop talking. When you hear yourself answering why because how was slow. When there is no thing on the table. When you have turned a whisk into a lecture on kitchens. One something. One how. Then stop.

Practice that actually builds learning

Blocked, for a new move. The day you introduce how-versus-why, only one pictured event. The day you introduce an object, only the object, and teach the bit they need before you ask. Mixing a walk, a gadget, and a theory-of-knowledge talk in one sitting makes the child hunt for the “right” school move instead of looking.

Mixed, for when to use it. Later the same week, the picture reappears next to the whisk and a puddle. Mixing is the practice of choosing: is this a how, a why, a

who-saw, or a bit of knowledge we still need? You impose that mix on the week you already have.

One incorrect example to diagnose. A fluent sentence with no look: “It spilled because the cat is naughty,” offered as how-do-you-know. Or a maxim with no object: “we should consider both sides,” with nothing on the table. Hear the mash or the empty maxim. Put a finger on the puddle. Teach the bit. Then ask again.

These are illustrations, not reported families.

Named try-it: Two pictures, two questions (in-home)

Time. Eight to fifteen minutes on the sofa.

Materials. One pictured event. A race, a spill, a finished cake, a knocked tower. A book you already own, or two drawings you make badly. A look in the last picture. A plausible why somewhere in the pictures.

Safety. None beyond ordinary sitting. Skip a picture that is a live fight.

The fun. Being a detective of *that* versus *why*. Catching the mash without a scold.

The skill. Kuhn’s how-versus-why, kept apart. How do you know it happened? Then, later, why might it have happened?

Say: “How do you know it happened?” Wait. Point if they leak into why. Only after how has a home — a different sitting if you need one — ask why it might have happened. Can those answers be different? How could we check the how (look at the last picture again)? You may change your mind.

Named try-it: Object you can hold (in-home)

Time. Five to ten minutes at the kitchen table.

Materials. One kitchen gadget, a magnet, a cloth, a whisk, a peeler — one. Not a drawer emptied onto the table.

Safety. No tasting. Pinch warning for magnets; keep small magnets away from mouths and from each other if they can snap. Peelers and graters are adult-held if

the child is five. No flame. No unknown berries.

The fun. “What is it for?” Holding the thing.

The skill. Knowledge first. Teach the bit you need, then ask how we know. A maxim about tools will not implement if they do not know the tool.

Say: “What is it for?” If they do not know, tell them in one sentence, using it if you can — a splash of water in a bowl, a magnet on a spoon. Then: “How do we know it was used?” Batter on the wires. A wet cloth. A spoon stuck. Then, separately: “Why might someone have used it?” One object — not a fair-test year. One bit of knowledge. One how.

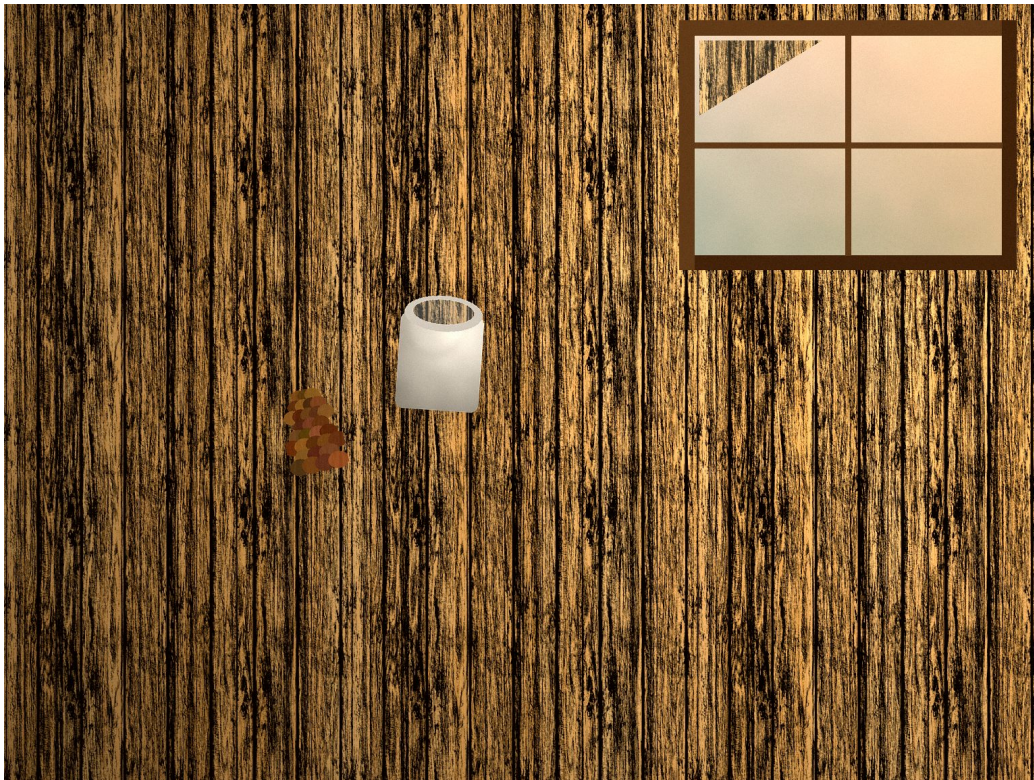


Figure 8: A whisk, a bowl with a little batter on the wires, and a cloth folded beside them on a kitchen table. No people. No logos.

Named try-it: Walk noticing (out-of-home)

Time. Five to twenty minutes of a walk you were taking anyway. Not an extra outing bought as a programme.

Materials. Eyes. Optional notebook mark.

Safety. Roads. Water. Depth of puddles. Cold. Lightning — go in. Unknown plants: looking, not tasting, not foraging school. Other people's dogs. No lecture to strangers.

The fun. Stopping. "What do you notice?"

The skill. Notice, name, criteria ("how do you know it's a...?"), else, cheap check. Knowledge on a walk is the bit they already have, plus one word you teach if they need it. Not Forest School. Not a nature-spirituality unit.

Say: "What do you notice?" Then: "How do you know it's a puddle?" (shine, wet, splash under a stick). "What else could it be?" (shadow, wet leaf). "How could we check?" Look closer; look from the other side; come back after a cloud. If they hunt for the "right" nature word, the adult filled the walk with a lecture, or wait-time was zero. Stop. Point. Wait.

Named try-it: Who was in a position to know (in-home, with a garage cousin)

Time. Three to eight minutes, when it actually happens.

Materials. A disputed object: the bike in the garage, a snack moved from the counter, a book on a shelf. Two people who were in different places.

Safety. No blame ritual. No using the sitting to catch a sneak. Curious about *who* saw, not who is in trouble.

The fun. Being the one who saw. Being allowed to say "I don't know, I was in the other room."

The skill. Source, not volume of voice. Children already weigh speakers. The next move is still a check if a check is cheap. Take the person who was there seriously.

Still look in the garage.⁶⁴

Say: “Who saw?” “Who was in a position to know?” If the loud person was not there, volume is not knowledge. If the quiet person was in the garage, they may have the look. Then: “How could we check?” Open the garage if that is cheap and kind. Repeat the check — the bike is there or not — not the rumor in a singsong.

Out-of-home cousin: on a walk, who was looking when the puddle was splashed; at a park, who was there when the bag was put on the bench. Same move. No interrogation of other families’ children.

Talk box

This is an illustration, not a reported family. A pictured spill is on the table. The parent has not announced the word *evidence*.

Opening question

“How do you know it happened?”

Then, later, separately: “Why might it have happened?”

Not: “What is evidence?”

Follow-ups (pick three to five; you will not use all of them every sitting)

1. What did you see?
2. What were you told?
3. What do you hope? Can those be different?
4. How could we check?
5. Who was in a position to know?

How to wait

Ask how first. Count a slow three. Look at the picture, not at the child’s face, if the silence is hard. After they stop, wait again. Do not fill a slow how with a why. If they are mid-reason, do not cut them off. Stahl’s think-time, labelled classroom-origin. Rowe’s waits were science class. Use the pause.

⁶⁴Paul L. Harris and Melissa A. Koenig, “Trust in Testimony: How Children Learn about Science and Religion,” *Child Development* 77, no. 3 (2006): 505–524. Children already weigh speakers; the next teaching object is reason plus check. Playground stakes only in this chapter.

What a stuck silence usually means

They collapsed how and why, and they can feel the mismatch. Or they do not know enough about the object to think — the maxim had nothing to bite. Or the question was recitation in disguise (you already had “the trophy” in mind as the only allowed word). Or wait-time after the question was zero. Or they are guessing what you want. Or they offered a wish where a look was asked for. Next move: smaller how, finger on the look, or one sentence of knowledge then the question again. If they do not know the whisk, teach the bit; do not wait longer at an empty cupboard. Done enough this week: one how that points, and — separately — one why that does not steal the how.

For the student

This page is for you.

Thinking needs a thing. A picture. An object. A puddle. A bike in a garage. A sentence about “thinking hard” with nothing on the table is a sentence with nowhere to go.

Two questions. They are different.

How do you know it happened? Point at a look. A puddle. A trophy. A bike.

Why might it have happened? A story that would make sense. A sleeve. Fast shoes. Someone wanted a ride.

You may answer both. You may not mash them. If someone asks how, and you say why, you can try again.

A tiny worked example

A picture of a race. The last picture shows a cup in someone’s hands.

“How do you know they won?”

“Because they’re holding the cup.”

Later: “Why might they have won?”

“Because their shoes look fast.”

Those can both be said. They are not the same sentence.

If you answered “fast shoes” when you were asked how, you gave a why. You can point at the cup and try how again.

Two tries

1. Look at one picture of something that happened — a spill, a race, a cake. Answer how you know it happened. Then, after a wait, answer why it might have happened. Point for how.
2. Hold one real object in the kitchen. If you do not know what it is for, ask. Then say how you know it was used, if it was. Then, separately, why someone might have used it.

Write nothing if writing fights the sitting. If you are older and writing is easy, you may write two lines: *How I know* and *Why it might be*. Fill your own blanks.

Explain it back

Tell someone at the table, in your own words, the difference between how you know it happened and why it might have. Then point at a look in a picture. Then say who was in a position to know about a bike, or a snack, or a puddle — and how you could check.

Challenge

Some people answer “how do you know?” with a good story. Some people say “think from both sides” with nothing on the table. Some people believe the loudest person. What would those three moves mean? How do you point at the look instead? How do you learn the bit you need about a whisk before you talk? How do you ask who saw?

You are allowed to struggle. You may use a picture, a whisk, a walk, a garage. You look. You talk. If you get stuck, ask for a hint — not the finished why. Then try again.

You are allowed to say “I’m not sure yet.” That is not losing. A picture a computer made of a puddle is a scene. It is not the puddle.

If it isn’t clicking

Three diagnostics. Each one has a next move. None of them is a verdict on talent, and none of them is a reason to wait for a birthday.

1. How and why still collapse, every sitting.

Sneakers still answer trophy questions. A sleeve still answers “how do you know it spilled.” Next move: how only, for a stretch of sittings. Hide the why. Finger on the last picture. Name the mash kindly: “that’s a why; I asked how.” If this is still the bottleneck after several weeks of short how-only sits, stay here. A walk full of what-else will not hold on top of a mash that never splits. A human who will sit with one picture and wait, not a tablet that narrates both answers, is a reasonable next step if the hour has become a fight.

2. There is nothing on the table, or the object is unknown and no one taught the bit.

Maxims in the air. “Consider both sides.” A gadget nobody named. Next move: one known thing. Teach one sentence if needed. Then how. Cover method words. If they can talk a stream about thinking and cannot point at a puddle, the something is missing. Slow down any “interesting” unit until a sentence can be tied to a look. Go ahead once they can answer how on a known picture and, separately, why. A tutor is useful if empty maxims remain the default after a couple of weeks of daily object-first work *and* the hour is a fight.

3. Volume of voice stands in for who saw, or the child will not talk.

The loud person wins. Or the silence after “how do you know” is a wall. Next move: shorter sits, one who-saw on a bike or a snack, then a cheap look in the garage. If silence is hard, look at the object, not at them. If they shrug, the question may be vague, or wait-time was zero, or they do not know enough yet. Teach the bit, or smaller how. If the hour has become a fight after a stretch of daily short sits, a human who will wait, not a chatbot that fills both columns, is the release valve.

When to slow down. Mash still the whole hour. Maxims still empty. Sits so long that looking never starts. A science year arriving because a science book was opened. Those are brakes. “Not ready” because of age is the brake this book will not use. “Not ready” because there is no something, or how and why have not come apart, is a real brake.

When to go ahead. How can point at a look. Why can wait its turn. One object has been named, then asked about. One walk has had notice, how, else, cheap check. One who-saw has been asked without a blame ritual. Short sits are ordinary. Then picture books in the next chapter have somewhere to sit. Being “curious about everything” is not a reason to skip the look.

When to get a human tutor. You have run the two-picture sitting, or the object sitting, or the who-saw sitting, for a stretch of daily sittings, and the same diagnosis is still the one in the room, and the hour has become a fight. A tutor is a release valve, not a failure of the sitting. Keep yourself as the person who can still hear a mash and an empty maxim. Outsourcing the hearing is the thing to avoid, not asking for help.

Tools, including AI

Optional helpers for you, the adult. The full rules live in the thinking-hour box in the front of this book. This chapter is a pointer, not a second policy paper.

The child looks and talks first. You hold the something. A tool may explain today's two questions *to you*, suggest extra questions you then vet, write a short script for *you* to say after the child has tried, offer a hint after an attempt, or help you diagnose a reason the child already gave.

Leave these out of the hour: an unsupervised chatbot as the only partner; a tool that writes the child's how or why; a pretend expert; a detector score; a certificate of thinking; a tool asked to invent what is in the garage or whether the puddle is water. Ages five to ten are scripts and parent-child talk, not live open chat.

A fluent paragraph that fills both columns is performance, not the child's look. If the tool produces the something, the child is a spectator. Point back at the hour.

A picture, a whisk, a walk, and a garage door are tools too. Use them, then fade them.

What “done enough” looks like

Placement is by skill, not birthday. A child who still answers how with why is still in the five-to-seven band of this chapter, whatever their age. A child who can write two labelled lines and still talks in empty maxims is not done with the something. A publisher's workbook is a scope, not a legal grade. The record is a notebook of questions, stimulus named. The title a stranger can read is still Reading, or Science.

Checklist before moving on

- You can hear a maxim die when there is nothing on the table.
- You can keep “how do you know it happened?” from collapsing into “why might it have happened?”
- The child can point at a look in a picture to answer how, at least sometimes, after a wait.
- Why, when it is asked, can wait its turn and not steal the how.
- One object has been named (the bit of knowledge taught if needed) and then asked about.
- One walk has had notice, how-do-you-know, what-else, and a cheap check, without becoming a programme.
- Who-was-in-a-position-to-know has been asked once, without a blame ritual, and a cheap check has been available.
- “I’m not sure yet” has been allowed.
- Sits can be short. You did not require a method poster, a science year, or a diploma sentence.
- You can hear a mash, an empty maxim, and a loud voice standing in for a look, and you can ask a good question, without taking the looking.

If most of that list is true, go on to picture books and stories, even if the birthday says otherwise. If the birthday says “third grade” and how still means why, stay. The next chapter types books as objects — perspective, mistake, reason, check — with the two questions still in the room.

A path through ordinary challenges is the promise. A diploma is not.

Chapter 4

Picture books and stories



Figure 9: An opened picture book as an object on a table, two pages visible as generic animal shapes, not a brand cover; a library card as a still-life with no readable living-brand logo; a small stack of unmarked books. No people.

Why this matters

What does the mouse see? What does the dog see?

That is not a request to define *perspective*. It is not a test of the theme. It is two questions about one cat, asked over an opened book on a sofa you already own. The mouse page and the dog page are different. They can both be looking at one cat. The child can point. Pointing is the check.

This chapter treats picture books as thinking *objects*. It types them. Four types will carry the week, not fifty titles:

- **Perspective** — more than one way to see the same thing.
- **Mistake** — a mark, a try, what happened after.
- **Reason** — how do you know; what are we going by.
- **Check** — look at the other page; look at the picture, not the moral you brought.

A title appears here only if a publisher or author page was opened for this book, and only if the plot is not a live fight. Four books are opened: Brendan Wenzel's *They All Saw a Cat* (Chronicle, 2016) for perspective; Amy Krouse Rosenthal and Tom Lichtenheld's *Duck! Rabbit!* (Chronicle) for perspective and for knowing when to stop an argument; Peter H. Reynolds's *The Dot* and *Ish* (Candlewick) for mistake and try-again.⁶⁵ If your library holds another perspective book and not the cat, use the one you can open. Age labels on publisher pages are marketing. A nine-year-old can still use the cat book as a perspective object. Skill, not birthday.

Dialogic reading is the neighboring literacy object. Prompt, evaluate, expand, repeat. Completion, recall, open-ended, wh-, distancing. Those moves help oral language in preschool. They are not a critical-thinking curriculum. Literacy is not CT. This book's extra move is the *reason* and the *check*, on a story the child understood.⁶⁶ A literacy rating is not a thinking rating on *The Dot*. Evaluate —

⁶⁵Brendan Wenzel, *They All Saw a Cat* (San Francisco: Chronicle Books, 2016), Caldecott Honor; publisher page opened for this book. Amy Krouse Rosenthal and Tom Lichtenheld, *Duck! Rabbit!* (San Francisco: Chronicle Books); publisher page opened, including the note on kids who do not know when to let go of an argument. Peter H. Reynolds, *The Dot* and *Ish* (Somerville, MA: Candlewick Press); publisher pages opened. Access date for URLs in these notes: 1 September 2026. Age labels on publisher pages are marketing, not a skill gate.

⁶⁶What Works Clearinghouse, *Dialogic Reading* (revised 8 February 2007): positive effects on oral language for ages 3–5 in centre-based settings; no discernible effects on phonological processing; improvement index for oral language +19 percentile points (range –6 to +48). Literacy

hearing a sentence and improving it — is already in the literacy list. That is the opposite of “never correct.” Steal it as manners. The sofa hour is not a thinking test.

What this idea unlocks is a sofa you were already sitting on. Without types, a stack of books becomes a canon you cannot finish. Without a reason-and-check question, the hour is a theme hunt, or a self-esteem sermon, or a live fight dressed up as “perspective.” With types, you can open one book, ask one question, look at two pages, and stop.

You do not need to be a literature professor. You do need to ask a reason-and-check question on a page the child understood, and to hear “the mouse is scared because mice are scared” as a story offered where a look at the mouse page was asked for.

This week you can learn the four types, and how to ask a reason-and-check question on a page the child understood. Today the child can look at two pages of one book and say whether the mouse and the dog saw the same cat, pointing at the pictures.

For the parent: understand it yourself

Many adults feel rusty around “using a picture book for thinking.” That is ordinary. You already know how to read with a child. This week adds one question and a check against the page. Five minutes of this section, then the warm-up at the end, is enough for tomorrow. The child still does the talking.

Everyday picture. The cat book is open. One page is close to the ground, whiskers huge. Another page is a dog’s-height view. You do not ask what the theme is. You ask what the mouse sees, then what the dog sees. Then: can both be looking at one cat? How do you know? The check is the two pages. If the child says the mouse is wrong because mice are small, they offered a story. Point at the page. The page is the look.

A second everyday picture: a first mark on paper, after *The Dot* or *Ish*. Was the first mark a mistake? How do you know? What happened after? The sitting is not

outcome, not critical thinking. The +19 figure is oral language, not thinking. Whitehurst’s PEER sequence (prompt, evaluate, expand, repeat) includes evaluate; CROWD prompts are completion, recall, open-ended, wh-, distancing. Grover J. Whitehurst et al., origin study (1988), was home, children younger than 3, and outside the WWC ECE review scope.

a sermon about believing in yourself. It is a reason about a mark, and a look at what the mark became.

Precise picture. Types, not a shelf. Perspective books let two viewers look at one thing. Mistake books let a “wrong” try become a start. Reason is the how-do-you-know you already have, asked of a character or a page. Check is the other page, the picture under the finger, the blurb versus page two. You can use all four types on one book. You do not have to.

They All Saw a Cat is the perspective object opened for this book. The kitchen questions are already in the last section: what the mouse sees; what the dog sees; whether both can be looking at one cat. *Duck! Rabbit!* is perspective plus a stop. The opened publisher page names kids who do not know when to let go of an argument. That is a reason-and-stop sitting, not a winner tonight. A cloud on a walk can be the out-of-home cousin: it looks like two things; we do not have to pick a winner.

The Dot and *Ish* are mistake objects. A mark. A try. What happened after. Not a culture-war artist biography. Not a self-esteem worksheet. How do you know it was a mistake? What would change your mind? The later pictures are a check.

Dialogic reading, named once so it does not haunt every page: Whitehurst’s home study was with children younger than three; the What Works Clearinghouse report is preschool oral language in centres. Positive on oral language. Not a thinking rating. Distancing prompts stay playground-safe (“have you ever waited in a line like this bear?”). They do not smuggle a live fight. At five, dialogic reading is still the right sofa practice, including evaluate. At eight to ten, the same shape can carry a slightly heavier talk-box question without pretending the literacy rating is a thinking rating.⁶⁷

Classroom philosophy programmes have used picture books, poems, films, and objects as stimuli — including in the English efficacy trial, which did not use Lipman’s novels.⁶⁸ A parent and one child do not vote in a circle. The portable

⁶⁷Same WWC report as note 66. At 5, dialogic reading remains appropriate sofa practice. At 8–10 the same shape can carry a heavier question without converting the WWC rating into a critical-thinking rating. Distancing prompts stay playground-safe.

⁶⁸Stephen Gorard, Nadia Siddiqui, and Beng Huat See, *Philosophy for Children: Evaluation Report and Executive Summary* (London: Education Endowment Foundation, 2015), ERIC ED581147. SAPERE’s model used stories, poems, films, images, artefacts, and picture books as stimuli, not Lipman’s novels. Efficacy trial; not a homeschool study. Education Endowment Foundation, “Philosophy for Children – second trial” (2021): 0 months on reading and maths at scale

pieces are a stimulus, a wait, one actual question, a check against the page. Institute lesson banks exist with hundreds of modules. Open a module if you own one; skip a prompt that is a live fight. Skip the stack. Common Sense Media is an advocacy rater. It does not pick this book's morals. IAPC novels are not picture books. They are not the default five-year-old object. For five-to-seven, the picture book is the right grain. For eight-to-ten, a short chapter story can be a stimulus if you have opened it and the plot is safe.

A well-known farm story about work and striking is a plot this book will not assign as a labour-politics lesson. If the family already owns it, the playground analogue is "what is a fair deal about chores." That is a substitution rule, not a recommended list. Other oft-mentioned titles stay off the recommended list until a page is opened and the plot is checked. Types, not a canon.

Wrong answers you should be able to hear

1. *Theme hunt / moral hunt.* "What is the lesson?" "What is the theme?" What it usually means: recitation in disguise, or a hunt for the adult's sermon. What to say: "What does the mouse see?" Point. The page is the work.
2. *A story offered as a look.* "The mouse is scared because mice are scared." "The first dot was a mistake because mistakes are bad." What it usually means: Kuhn's mash on a sofa — a why where a how was asked. What to say: "How do you know? Show me on the page."
3. *Never letting go. Duck! Rabbit!* as a fight to win. What it usually means: the stop was skipped. What to say: "Can it look like both? We do not have to pick a winner tonight." Then, if you need a check: the cloud on tomorrow's walk.
4. *Self-esteem sermon, or a live fight dressed as perspective.* The hour becomes "believe in yourself," or an identity or political argument the book did not ask you to run at this age. What it usually means: the type was abandoned. What to say: return to the mark, the two pages, the reason, the check. Skip the page that is a live fight. Walk to a different bay at the library.
5. *Literacy hour treated as thinking, or thinking treated as a fifty-title list.* CROWD prompts as a CT curriculum; or a canon you cannot finish. What it usually means: the neighboring object ate the sitting, or coverage won.

— copy in the resources chapter when a branded hour is named.

What to say: one book, one type, one question, a check against the page. Oral language can still happen. It is not the claim.

A sixth you will also hear: skip evaluate because “we never correct.” Hear the sentence. Improve the reason. Look at the page. Hearing is not endorsing.

Five-minute parent warm-up

Do this before the lesson, with one opened book and a scrap of paper, no child in the room.

Minute 1. Open the book you will actually use. If it is not one of the four, name which *type* it is: perspective, mistake, reason, check. If you cannot name a type, pick a different book.

Minute 2. Write today’s opening. For the cat: “What does the mouse see? What does the dog see?” For a mistake book: “Was the first mark a mistake? How do you know?” Count a slow three.

Minute 3. Find the check with your finger: two pages, or the mark and what it became. That is where you will look if silence is hard.

Minute 4. Write the wrong turn you must hear: a theme sentence, or a why with no page. Write the repair: “Show me on the page.”

Minute 5. Put the pencil down. You are ready. The child still talks.

If those five minutes are fluent for you, you can hear a theme hunt and a mash, and you know where the check lives. That is the job.

How to teach it this week

Run the thinking hour from the front of this book. This chapter fills it with one opened book. Warm-up on a page already seen. Short model of one question. Student talk, finger on the picture. One good question, then wait. If the reason is wrong, hear it, ask a better question, look at the page. Stop.

Warm-up (2–3 minutes, unaided). One page from last time. “What did the mouse see?” No device. No theme word.

Short model (3–5 minutes). You open to two pages. You ask what the mouse sees, what the dog sees. You wait. You point. Then you stop. You are showing

the check, not delivering a lecture titled *Perspective*.

Student attempt (8–15 minutes). The longest block, still a sofa sit. The child talks. The child points. You wait. Struggle before rescue: ask, wait, hint (“this page or that page?”), then a short model on *your* scrap.

One good question. Not “define perspective.” Not “what is the theme?” “What does the mouse see? What does the dog see?” Or: “Was the first dot a mistake? How do you know?” Or, on a known story: “What does she think is in the box?”

Talk (3–5 minutes). One spoken sentence that points. Five-to-seven: talk. Eight-to-ten may write a caption: “The mouse and the dog both looked at the cat. The pictures are different.”

Stop. While they still have a page left. One book. One type. A second sitting later in the week beats a stack.

Safety is ordinary reading. Skip a page that is a live fight. If the library display is a live controversy, walk to a different bay. You still pick the prompt. Librarians do not replace the parent on that choice.⁶⁹

Exact wording you can say

On perspective:

“What does the mouse see? What does the dog see?”

“Can both be looking at one cat?”

“How do you know? Show me on the page.”

On duck-or-rabbit:

“What do you see?”

“What else could it be?”

“Do we have to pick a winner tonight?”

On a mistake mark:

“Was the first mark a mistake? How do you know?”

⁶⁹American Library Association, Library Bill of Rights and interpretations on library-initiated programs: parents decide for their own children. Mission language is not a philosophy trial. New York Public Library mission language includes exploratory conversations — mission, not an RCT.

“What happened after?”

“What would change your mind?”

On a character who might be mistaken:

“What does she think is in the box?”

“Is she right? How do you know?”

For eight-to-ten, under a prompt: “What does she think *he* thinks?” Still a known story. Still not a gym.⁷⁰

When you are about to sermonise:

“Show me on the page. I’ll wait.”

Then wait. Slow three after you ask. Slow three after they stop. Look at the book, not at the child, if the silence is hard. Stahl’s think-time, classroom-origin. Rowe’s waits were science class. Use the pause.

Age-band moves: 5–7 / 8–10

5–7. The picture book is the right grain. Perspective is two pages and a finger. Mistake is a mark and what it became. Reason is how-do-you-know, pointed. Check is the other page. A character who did not see is first-order: she will look in the old place. Speech is talk. Dialogic reading shape still fits, including evaluate. Distancing stays local: a line, a wait, a mark like yours.

8–10. Same four types. A short chapter story can be a stimulus if you have opened it and the plot is safe. They can hold two minds under a prompt: what she thinks he thinks, in a story they know — the ice-cream-van *type*, not that story copied as a lesson. They can read a jacket and check it against page two. They can browse at the library and say why this book (cover, blurb, contents), then still do picture-book talk. They still mash a moral with a look. They still hunt for your sermon if you offer one. A nine-year-old may still need the cat book. Skill, not birthday.

Not a stable skill at either band: unaided far transfer from a sofa talk to a new unseen story; a thinking diploma; a fifty-title canon. Changing the talk on the sofa is easier than changing performance on a new task. Grade-five classroom enquiry

⁷⁰Josef Perner and Heinz Wimmer, “John thinks that Mary thinks that...,” *Journal of Experimental Child Psychology* 39 (1985): 437–471 (abstract). Second-order belief under prompt, unexpected early competence around 6 and 7; age range of the paper 5 to 10. Used here as a story *type* (what she thinks he thinks), not as the ice-cream-van story copied as a lesson.

has already shown more dialogic talk without transfer to a new interview, essay, or recall. Talk is still worth doing. It is not sold here as an engine.⁷¹

First try-it for the student

One opened perspective book, two pages, no theme card:

the mouse page and the dog page, or two viewers of one thing in the book you have.

Say: “What does the mouse see? What does the dog see?”

Wait. If they recite a moral, they hunted a sermon. Point at the page. If they say the mouse is wrong because mice are small, they offered a why. “How do you know? Show me.” If they point at both pages and say the pictures are different, and that both can be one cat, they looked. Can both be looking at one cat? How could we check? Look at the two pages again. You may change your mind.

Later the same week, the diagnostic item:

the same book, a different pair of pages, or *Duck! Rabbit!* as a stop.

If they still need a winner, the stop is the sitting. If they can leave two pictures standing, perspective is travelling.

How to fade help. First sitting: you point, you ask, they echo. Second: they point after a wait, you hint with “this page or that page.” Third: they ask what the other animal sees. Fourth: a cousin at the library, a book they chose, same type of question.

When to stop talking. When you hear a theme sentence leave your mouth. When you have opened a second book. When the sit has become a sermon or a fight. One book. One question. Then stop.

⁷¹Alina Reznitskaya, Monica Glina, Brian Carolan, Anna Michaud, Jon Rogers, and Lavina Sequeira, “Examining Transfer Effects from Dialogic Discussions to New Tasks and Contexts,” *Contemporary Educational Psychology* 37, no. 4 (2012): 288–306. Twelve fifth-grade classrooms; discourse became more dialogic; no statistically significant transfer to post-intervention interview, persuasive essay, or recall of argumentative text. Grade 5 is the top of this book’s age band. Talk is still worth doing; it is not sold here as an attainment engine.

Practice that actually builds learning

Blocked, for a new move. The day you introduce perspective, only two pages of one book. The day you introduce mistake, only a mark. Mixing types plus a library browse plus a second-order prompt in one sitting makes the child hunt for the “right” school move instead of looking at the page.

Mixed, for when to use it. Later the same week, perspective reappears next to a mistake mark and a library choice. Mixing is the practice of choosing: is this two views, a try, a reason, or a check against page two? You impose that mix on the week you already have.

One incorrect example to diagnose. A fluent theme sentence with no page: “The lesson is to be yourself.” Or a fight to win *Duck! Rabbit!* Hear it. Better question. Finger on the picture. The repair is the check, not a better sermon.

These are illustrations, not reported families.

Named try-it: Perspective pages (in-home)

Time. Ten to twenty minutes on the sofa.

Materials. *They All Saw a Cat*, or another opened perspective book the library holds. One book.

Safety. Ordinary reading. Skip a page that is a live fight.

The fun. The mouse page versus the dog page. Being the person who notices both can be one cat.

The skill. More than one way to see the same thing. Check: look at two pages.

Say: “What does the mouse see? What does the dog see?” Then: “Can both be looking at one cat? How do you know?” Point. What else could be true? How could we check that against the picture? You may change your mind.



Figure 10: An opened book on a table, two pages of generic cat-and-viewer shapes, unreadable as a brand cover, a finger-space where a child would point. No people. No logos. No pirated art.

Named try-it: Duck or rabbit (in-home, then a walk)

Time. Eight to fifteen minutes on the sofa, then — another day — five minutes of a walk you were taking anyway.

Materials. *Duck! Rabbit!* if you have it or the library holds it. If not, any picture that honestly looks like two things, or a cloud.

Safety. Ordinary reading. Roads on the walk. No lecture to strangers about their clouds.

The fun. Not picking a winner tonight. A cloud that looks like two things.

The skill. Reason, and stop. Perspective without a fight. What else could it be. We do not have to pick a winner.

Say: “What do you see?” Wait. “What else could it be?” “Do we have to pick a winner tonight?” If they will not let go, that is the sitting the publisher page already named. Hear the reason. Look at the picture. Stop before it is a quarrel. Out-of-home cousin: a cloud, a knot in a fence, a puddle that looks like a shadow. Same questions. No winner required.

Named try-it: Mistake mark (in-home)

Time. Ten minutes at the table.

Materials. *The Dot* or *Ish*, paper, one mark. A crayon or a pencil.

Safety. None beyond ordinary making. The sitting is not a critique of the child’s art as a person.

The fun. The angry mark that became a start. Making one mark of their own.

The skill. A “wrong” mark used. How do you know it was a mistake? What happened after? Not a self-esteem sermon. Not a culture-war artist biography.

Say: “Was the first mark a mistake? How do you know?” Wait. “What happened after?” How could we check? Look at the later pictures. You may change your mind: a mistake that became a start is allowed to change category. Then one mark on their paper, if they want. You do not finish their reason for them. You do not hang a diploma of trying.

Named try-it: Library browse-and-talk (out-of-home)

Time. Ten to twenty minutes in a library you were already using, or the week’s free sit.

Materials. One chosen book. The child chooses among three safe books. You still pick the prompt.

Safety. Ordinary library rules. Quiet voices. You still decide for your own child. If the display is a live controversy, walk to a different bay. No lecture to other families.

The fun. Choosing. Then talking about one book, not a stack.

The skill. Why this book (cover, blurb, contents) — a claim you can check against page two. Then picture-book talk of one type: perspective, mistake, reason, or check. Among homeschool households in the last federal subject table that asked, 66 percent used the library as a source of curriculum and books (2016). That is context, not a ranking. A public library’s mission language may include exploratory conversation. That is a mission, not a trial of philosophy at the desk.⁷² If the library does not hold *They All Saw a Cat*, another perspective book will do.

In-home cousin: the same book on the sofa tomorrow. The browse is the choice. The talk still needs a type and a check.

Talk box

This is an illustration, not a reported family. The cat book is open to two pages. The parent has not announced the word *perspective*.

Opening question

“What does the mouse see? What does the dog see?”

Not: “Define perspective.”

Follow-ups (pick three to five; you will not use all of them every sitting)

1. Can both be looking at one cat?
2. How do you know? Show me on the page.
3. What else could be true?
4. How could we check that against the picture?

⁷²Jiashan Cui and Rachel Hanson, *Homeschooling in the United States: Results from the 2012 and 2016 Parent and Family Involvement Survey*, NCES 2020-001 (Washington, DC: National Center for Education Statistics, 2019), Table 6: 66 percent of homeschool households used the library as a source of curriculum and books (2016). The 2023 First Look did not republish that subject table in the pages opened for this book. Context, not a ranking. <https://nces.ed.gov/pubs2020/2020001.pdf>.

5. You may change your mind.

How to wait

Ask. Count a slow three. Look at the page, not at the child's face, if the silence is hard. After they stop, wait again. If they are mid-reason, do not cut them off. Stahl's think-time, labelled classroom-origin. Rowe's waits were science class. Use the pause.

What a stuck silence usually means

The question was recitation in disguise — “what is the theme.” Or they are hunting for the adult's moral. Or wait-time after the question was zero. Or they offered a why (“mice are scared”) where a look at the mouse page was asked for. Or they do not yet understand the story, so a thinking question is unfair — read it again, then ask. Next move: smaller question, finger on the page. “This page or that page?” is a hint. The finished moral is not a hint; it is the grab. Done enough this week: a spoken sentence that points at two pages.

For the student

This page is for you.

A picture book is a thing you can think about. Not a test. Not a sermon. Two pages. A finger. A question.

Four kinds of sitting:

Perspective. What does the mouse see? What does the dog see? Can both be looking at one cat?

Mistake. Was the first mark a mistake? How do you know? What happened after?

Reason. How do you know? What are we going by?

Check. Look at the other page. Look at the picture, not only the sentence in your mouth.

A tiny worked example

Two pages. A mouse's view. A dog's view.

“What does the mouse see?”

You point.

“What does the dog see?”

You point.

“Can both be looking at one cat?”

“Yes. The pictures are different. It is still one cat.”

That is the whole trick for today. You showed it on the page.

Two tries

1. Open one real book to two pages. Say what one viewer sees. Say what the other sees. Say whether they can both be looking at the same thing. Point.
2. Make one mark on paper after a mistake book, or look at a cloud on a walk. Was the mark a mistake? What else could the cloud be? You do not have to pick a winner tonight.

Write nothing if writing fights the sitting. If you are older and writing is easy, you may write: “The mouse sees . ***The dog sees*** . I know because I looked at ____.” Fill your own blanks.

Explain it back

Tell someone at the table, in your own words, whether the mouse and the dog saw the same cat, pointing at the pictures. Then say one time a first mark was called a mistake, and what happened after. Then say how you could check a cover or a blurb against page two.

Challenge

Some people hunt for the lesson. Some people will not stop arguing duck versus rabbit. Some people say the mouse is scared because mice are scared, and they do not look at the page. What would those three moves mean? How do you point instead? How do you stop? How do you ask how you know?

You are allowed to struggle. You may use one book, one mark, one cloud, a library choice. You talk. You point. If you get stuck, ask for a hint — not the finished moral. Then try again.

A picture a computer made of a cat is a scene. It is not the book in your hands. The book in your hands is the check.

If it isn't clicking

Three diagnostics. Each one has a next move. None of them is a verdict on talent, and none of them is a reason to wait for a birthday.

1. The child hunts for the theme, or offers a why with no page.

"The lesson is..." "Mice are scared because..." Recitation, or a mash. Next move: two pages only. Cover any blurb. Finger on the picture. "What does the mouse see?" If this is still the bottleneck after several weeks of short sofa sits, stay here. A library browse will not hold on top of a sermon hunt. A human who will sit with two pages and wait, not a tablet that narrates the moral, is a reasonable next step if the hour has become a fight.

2. The child will not let go, or the hour becomes a sermon — self-esteem, or a live fight.

Duck! Rabbit! as a quarrel. *The Dot* as a pep talk. A display at the library pulling you into a controversy you did not choose. Next move: the stop is the sitting. "We do not have to pick a winner tonight." Or: one mark, how-do-you-know, what happened after — no diploma of trying. If the display is a live fight, a different bay. Go ahead once they can leave two pictures standing, or name a check against a page, without a sermon. A tutor is useful if the quarrel or the sermon remains the whole hour after a couple of weeks of daily two-page work *and* the sitting is a fight.

3. The child does not understand the story yet, or will not talk, and a thinking question is unfair.

Stuck silence is often "read it again," not refusal. Or wait-time was zero. Or they are guessing the moral you want. Next move: read first, understand first, then one question. Shorter sits. Look at the page if silence is hard. Dialogic reading — including evaluate — can still be the right sofa practice while understanding catches up. That is oral language. It is allowed. It is not yet the extra move. If the hour has become a fight after a stretch of daily short sits, a human who will wait, not a chatbot that writes a book report, is the release valve.

When to slow down. Theme hunt still the default. No finger on the page. A stack instead of one book. A live fight in the example. Those are brakes. "Not ready" because a nine-year-old "should" have left picture books is the brake this book will not use. "Not ready" because the story is not yet understood is a real brake.

When to go ahead. Two pages have been compared, pointing. A stop has happened without a winner. A mark has had how-do-you-know and what-happened-after. A library choice has had a why-this-book and then a talk. Short sits are ordinary. Then the kitchen in the next chapter has somewhere to sit. Loving books is not a reason to skip the check.

When to get a human tutor. You have run the two-page sitting, or the mistake-mark sitting, or the wait after the question, for a stretch of daily sittings, and the same diagnosis is still the one in the room, and the hour has become a fight. A tutor is a release valve, not a failure of the sitting. Keep yourself as the person who can still hear a theme hunt and a mash. Outsourcing the hearing is the thing to avoid, not asking for help.

Tools, including AI

Optional helpers for you, the adult. The full rules live in the thinking-hour box in the front of this book. This chapter is a pointer, not a second policy paper.

The child talks and points first. You hold the book. A tool may explain a *named page to you* (title, page number), suggest extra questions you then vet (throw out live fights, secrets, pretend experts), write a short script for *you* to say after the child has tried, offer a hint after an attempt, or help you diagnose a reason the child already gave.

Leave these out of the hour: an unsupervised chatbot as the only partner; a tool that writes the child's reason or a book-report paragraph; a pretend expert; a detector score; a certificate of thinking; a tool asked to invent what is on page 12. Ages five to ten are scripts and parent-child talk, not live open chat.

A fluent theme paragraph from a machine is performance, not the child's check. Generated pictures of a cat are a scene. They are not the opened book. If the tool produces the reason, the child is a spectator. Point back at the hour.

The opened book, a crayon, and a library card are tools too. Use them, then fade them.

What “done enough” looks like

Placement is by skill, not birthday. A nine-year-old may still need two pages of a cat. A six-year-old may already stop a duck-or-rabbit fight. A publisher’s age label is marketing. A “grade 2 critical thinking workbook” is a scope, not a legal grade, and not a transcript line. The record is a notebook of questions, dated, stimulus named: the title, the question, what the child said, what you looked at. The title a stranger can read is still Reading. It is not Critical Thinking I, and it is not a brand.

Checklist before moving on

- You can name the four types: perspective, mistake, reason, check.
- You can ask a reason-and-check question on a page the child understood.
- The child can look at two pages and say whether two viewers saw the same thing, pointing.
- At least one stop has happened: two pictures, no winner required tonight.
- At least one mistake mark has had how-do-you-know and what-happened-after, without a sermon.
- At least one library browse has chosen among three safe books, then talked, with you still picking the prompt.
- Dialogic reading is still welcome as oral language, and is not being called a thinking curriculum.
- A wrong reason has been heard, then checked against the page, without crushing the talk.
- Sits can be short. One book. You did not require a fifty-title list, a novel for five-year-olds, or a diploma sentence.
- You can hear a theme hunt, a mash, and a live fight dressed as perspective, and you can return to the page.

If most of that list is true, go on to the kitchen — snacks, boxes, one-change looks — even if the birthday says otherwise. If the birthday says “chapter books only” and the finger still cannot find the mouse page, stay. The next chapter is inside the home, with the same five moves and the same two questions, and a book can still sit on that table.

A path through ordinary challenges is the promise. A diploma is not.

Chapter 5

Inside the home



Figure 11: A kitchen table with two plates, two ice cubes, a generic box with a blank “best” badge, and an open notebook. No child, no logos.

Why this matters

What is the one thing we changed?

That question unlocks the kitchen. A sofa, a counter, a toy floor, and a box already bought are enough. You do not need a lab. You do not need a circle of twenty. You do not need a Bronze-to-Gold award scheme. The furniture is already there. The move is to change one thing, keep the rest the same, and look.

A kitchen is a one-change lab if the family wants it, and a claims lab if they do not. Bread rising. Ice melting. Two cloths and a spill. A snack jar that may or may not hold three. A package that says “best.” A toy race with a trophy in someone’s hand. A gadget nobody has named yet. Each of those is something the child already knows. Thinking lives on that something. It is not a bicycle you install at six and ride to every later problem.

A one-change check is scientific reasoning — deciding which factor did the work — not a general thinking gym you install in the kitchen.⁷³ The evidence for teaching it comes from children ages seven to ten who were shown how to design an unconfounded test, not from a sitting that claims to measure “critical thinking” as a trait.⁷⁴ The kitchen version is smaller and honest: name the claim, name the one thing you will change, name what you will keep the same, look, say what you saw.

That is worth the struggle because the house already makes claims all day. “There are three left.” “This one is best.” “It melted because it wanted to.” “She won because her sneakers are fast.” Each of those can be a wish, a story that makes sense, or a look. The parent who can hear which is which can teach this week. The child who can look, and then change the sentence if the look goes the other way, has practiced deciding what to believe on a domain they actually know.

⁷³Zhe Chen and David Klahr, “All Other Things Being Equal: Acquisition and Transfer of the Control of Variables Strategy,” *Child Development* 70, no. 5 (1999): 1098–1120. $n = 87$, ages 7–10. Explicit training plus probes outperformed probes-only on designing unconfounded experiments; remote transfer improved with age. The construct is control of variables (a fair test), which is scientific reasoning, not a generic critical-thinking inventory. Access date for sources in these notes: 1 September 2026.

⁷⁴Martin Schwichow, Simon Croker, Corinne Zimmerman, Tim Höffler, and Hendrik Härtig, “Teaching the Control-of-Variables Strategy: A Meta-Analysis,” *Developmental Review* 39 (2016): 37–63. Mean $g = 0.61$ (95% CI 0.53–0.69) after excluding outliers; assessment format is a major source of between-study variance. Control of variables “does not routinely develop without practice or instruction.” Not a Watson–Glaser or CCTST meta-analysis.

This week you can learn one-change, and how to hear a mechanism-story offered as if it were a look. Today the student can set two ice cubes of the same size, one in sun and one in shade, and say what they saw.

For the parent: understand it yourself

You do not need to be a philosopher. You do need to hear “because I want three” as a wish, not a count, and “it melted because it was sad” as a story, not a look.

Everyday picture. Two ice cubes. Same size. One on a sunny plate. One on a plate in the shade. Ten minutes later, one is a puddle and one is still a lump. If you also used a bigger cube in the sun, you cannot tell whether sun or size did the work. If you only moved the light and kept the size, the plates, and the starting time the same, you can say what you saw about the one thing you changed.

Precise picture. A *claim* is a sentence that can be true or not, about something you can look at. “There are three cookies.” “This cloth soaks more.” “Best,” on a box, is a claim too — a word someone wrote. A *one-change check* is a look in which only one thing is different on purpose. Everything else you can reasonably keep the same, you keep the same. Then you look. Then you say what you saw, not what you hoped. A *reason that makes sense* is not the same as *evidence that it happened*. “He won because he has fast sneakers” is a why that might be true. “He’s holding the trophy” is how you know he won this race.⁷⁵ Children between four and six are still learning that distinction. At five to ten they will still mash them. Hearing the mash is the parent’s job.

You also already have a *speaker* in the house: the box on the counter. What does it say? What is missing? How could we check? The box is not a sermon about food. It is a sentence on cardboard. Speakers can be incomplete.⁷⁶

⁷⁵Deanna Kuhn and Susan Pearsall, “Developmental Origins of Scientific Thinking,” *Journal of Cognition and Development* 1 (2000): 113–129. Between about 4 and 6, the distinction between a theory that makes an event plausible and evidence that it occurred develops rapidly and remains incomplete. Trophy versus sneakers: “How do you know he won?” answered “because he has fast sneakers” instead of “he’s holding the trophy.” Prompted 4-year-olds mean 1.87/6 evidence answers; 6-year-olds 4.19/6; adults 6.00/6. Most of the time, still limited. Deanna Kuhn, “How Do People Know?,” *Psychological Science* 12, no. 1 (2001): 1–8, on young children’s difficulty differentiating an explanation of why a claim makes sense from evidence that the claim is true.

⁷⁶Package-on-the-counter is a reading-and-claim practice. Safe examples: serving size, “serves 4” on a small tin, a picture versus a flavour list. Not a nutrition culture-war and not a food-policy

And you have *namers*. Yesterday someone called the whisk a fork and was wrong. Today a new gadget sits on the counter. Whom do you ask? Children this age already track who has been a careful namer. They also already ignore a careful namer who contradicts what they themselves just saw.⁷⁷ Take the careful speaker seriously. Still look if looking is cheap.

Wrong answers you should be able to hear

1. Two things changed; one claim. “The sun melted it — and also that cube was smaller, and I breathed on it.”

What it usually means. The one-change rule was never named, or the wow ate the rule.

What to say. “What is the one thing we changed? What did we keep the same? Can we tell for sure?”

2. The hope reported as the look. “There are three, because I want there to be three.” Or: “It will melt because I want it to be a race.”

What it usually means. A wish was offered where a count or a look was asked for. That is ordinary. It is still a wish.

What to say. “I hear that you want three. How could we check? Let’s look in the jar.”

3. A mechanism-story offered as the look. “It melted because it was sad.” “The cloth drank the water because it was thirsty.”

What it usually means. A why that makes a picture in the mind is standing in for what we saw. The story may even be charming. Charm is not the check.

hour.

⁷⁷Melissa A. Koenig, Fabrice Clément, and Paul L. Harris, “Trust in Testimony: Children’s Use of True and False Statements,” *Psychological Science* 15, no. 10 (2004): 694–698; Fabrice Clément, Melissa A. Koenig, and Paul L. Harris, “The Ontogenesis of Trust,” *Mind & Language* 19, no. 4 (2004): 360–379. When they could identify who had been reliable, children showed selective trust; most four-year-olds also ignored a hitherto reliable informant whose claim conflicted with what they themselves had seen. Melissa A. Koenig and Paul L. Harris, “Preschoolers Mistrust Ignorant and Inaccurate Speakers,” *Child Development* 76, no. 6 (2005): 1261–1277 (abstract opened). Paul L. Harris and Melissa A. Koenig, “Trust in Testimony: How Children Learn about Science and Religion,” *Child Development* 77, no. 3 (2006): 505–524. This chapter uses the namer-and-look type. It does not use religious case studies as exercises.

What to say. “I hear that story. What did you actually see? What is the one thing we changed?” Then, if needed: “Ice melts when it gets warmer. We put one in the sun. That is the look we have.”

4. The box as proof. “It’s best. It says best.”

What it usually means. A fluent sentence from a speaker who wants to be picked. The word is on the front. The list is on the side. Another box is on the shelf.

What to say. “What do you mean, *best*? Who wrote that word? What else could we look at?” Turn the box. Leave the front for the side, or for the other box.

5. Fast sneakers instead of the trophy. “She won because her shoes are fast.” The ribbon is in her hand.

What it usually means. A why that would make the win plausible, offered as if it were how we know the win happened. The mash is common. It is still a mash.

What to say. “Why might she have won, and how do you know she won *this* time? Those can both be interesting. They are not the same question.”

Five-minute parent warm-up

Before the sitting, no child in the room:

1. Write tonight’s claim in one sentence. Then write the one thing you will change, and two things you will keep the same. If you cannot name the one thing, tonight is not a fair test. It can still be a snack count or a box-turn.
2. Say out loud, to the empty room: “What is the one thing we changed?” Wait a slow three. It will feel long. That feeling is the point. Three seconds is a convention from classroom think-time, not a homeschool study.⁷⁸
3. Write one wrong reason you expect to hear — a wish, a sad-ice story, or “the box says best” — and the better question you will ask next. Then, if needed, the better reason or the look.

If those three are fluent for you, you can hear a wish, a mash, and a two-things-at-once. That is the job. The child still looks.

⁷⁸Robert J. Stahl, “Using Think-Time and Wait-Time Skillfully in the Classroom,” ERIC Digest ED370885 (1994). Think-time; about three seconds as a convention, not a sacrament; written for classroom teachers. A parent can use the move. The parent is not replicating a homeschool wait-time trial; none was opened for this book.

How to teach it this week

The sitting uses the thinking-hour shape already in the front of this book: warm-up, short model, student attempt, one good question, mixed practice, exit ticket. Fill it with one-change, a snack, or a box. Stop while it is still a sitting.

Warm-up (2–4 minutes). Yesterday’s ice, or yesterday’s jar, from memory. “What did we change? What did we see?” No tool. No new apparatus yet.

Short model (5–8 minutes). Two plates. Two ice cubes of the same size. You name the claim: “Sun makes ice melt faster.” You name the one thing you will change: light. You name what you will keep the same: size, plate, starting time. You set them out. You wait. You look. You say what you saw. Then you show the *wrong* cousin on purpose: a big cube in the sun and a small cube in the shade. “Can we tell for sure?” Wait. Explain why not. Then stop talking sooner than feels polite.

Exact wording you can steal.

On the rule: “What is the one thing we changed?”

On the rest: “What did we keep the same?”

On the look: “What did you see — not what you hoped?”

On a wish: “I hear that you want that. How could we check?”

On a story: “I hear that. What did we actually look at?”

On a box: “What do you mean, *best*? Who is that word for?”

On a mash: “How do you know it happened? That’s a different question from why it might have.”

On a namer: “Who was careful yesterday? We can still look.”

On mind-change: “You thought X. We looked. You can say the new thing. That is not losing.”

Student attempt. After the model, they run the next pair — two cloths and a spill, or two objects in a tub — with you watching. Product on a sticky note: the one thing changed, two things kept the same, one sentence of what they saw. You wait. You do not “help” one cube. You do not finish the sentence.

One good question. After the attempt: “If we had changed two things, could we tell for sure?” The child generates the why.

Mixed practice. One snack count. One box-turn. One “how do you know she won?” on a toy race already finished. Mix, so the move is not glued to ice.

Exit ticket (2–5 minutes, unaided). “What is the one thing we changed? What did you see?” Spoken is enough at five to seven. At eight to ten, one dated line in the notebook: claim, one change, what we saw. Tool closed.

How to fade help. You name all three (claim, one change, keep-the-same) → they name the one change while you name the rest → they name all three → they run the next sitting with you in the doorway. When they can catch a two-things setup without your prompt, put the sticky-note scaffold away. Bring it back when a new kind of check arrives — a playground throw, a package word, a namer.

When to stop talking. After one model and one question. You hold the key: is there a claim, one thing changed, a look, and a wait? You do not become a lecture about variables. The word *variable* can wait. The look cannot.

Age-band moves

5–7. Keep the check near. Same size ice. Same two cloths. A jar they can see into. A box they can turn. Speech is talk, not a paragraph. First-order is enough: I thought there were three; we looked; there are two. A why-story will still arrive as if it were a look. Hear it. Ask what they saw. Then look. You may name a better reason if the sitting needs one. Silence in the face of a false reason leaves them with the error.

8–10. Same moves, slightly heavier grain. They can name the one change and two keep-the-sames before the water hits the cloth. They can turn a box and say what the front claims and what the side lists. They can separate “why she might have won” from “how we know she won this race.” They can write one line. Wait can include that line. They still mash, some of the time. They still need the object. A fluent sentence is not a check.

Placement is by skill, not birthday. A nine-year-old who still reports the hope is still in the 5–7 band of this chapter. A six-year-old who catches “you breathed on that one” is already practicing the 8–10 catch. A publisher’s “grade 2 critical thinking workbook” is a scope, not a legal grade, and not a transcript line.

Practice that actually builds learning

Named try-its. Time, materials, safety, the fun, the skill. At least one lives at the counter. At least one lives outside, so the move can travel. Kitchen, walk, store, park, and library *are* the practice. They do not replace the named move.

Try-it 1 — Kitchen fair test: soak, melt, or sink

Time. 10–30 minutes. Then stop.

Materials. A bowl and two cloths; or two plates and ice; or a tub and two objects that may sink or float. Water. A towel for the floor. Optional: a dated notebook line.

Safety. Floor wet; drip; ordinary water. No small objects for a five-year-old who still mouths things. Not a stove and not a flame for a five-year-old. You do not “help” one cube. You do not taste unknown things to make a test more exciting. Heat, if you use it at all with an older child, stays in an adult’s hands and is not this chapter’s default.

The fun. Racing melt. Watching a cloth darken. A sink-or-float that might surprise.

The skill. Change **one** thing. Keep the rest the same. Look. Say what you saw, not what you hoped.

How to run it. Name the claim (“this cloth soaks more,” “sun melts ice faster,” “the heavy one sinks”). Name the one thing you will change (which cloth; light; which object — pick one). Name two things you will keep the same (amount of water, starting time, size of cube). Look. If the child offers a wrong reason — “it melted because it was sad” — hear it, then a better question, then if needed a better reason. Last thoughts: “I used to think... now I think...” That sentence is allowed. It is not a confession ritual.

5–7. You name the one change. They pour or they watch. They say what they see in a short sentence.

8–10. They name the one change and the keep-the-sames first. After the look, they say whether we can tell for sure. If they changed two things by accident, that is information. Run it again with one change. Cue: “this is like the ice.”

Try-it 2 — Snack claim

Time. 3–8 minutes, when the claim actually happens.

Materials. The jar already there. Ordinary food hygiene.

Safety. No shaming who ate what. The sitting is a count, not a trial of a person.

The fun. Looking in the jar. Being right, or changing your mind.

The skill. Decide what to believe. Count versus wish versus “I saw yesterday” (yesterday is weak).

How to run it. Someone says there are three. Ask how they know. Wait. If the answer is a wish or a memory of yesterday, look. Count together if counting is still new. The child says the new number. You may change your mind when the look goes the other way.

5–7. The look is the jar. The sentence is short.

8–10. Add: did you see, or did someone tell you, or do you hope so? Still look. Yesterday’s count is a clue, not this afternoon’s number.

Try-it 3 — Package on the counter

Time. 3–8 minutes.

Materials. One box already bought. A generic “best,” “serves 4,” or a picture of fruit on a yoghurt that lists fruit *flavour* — safe, ordinary package language. Not a living grocery brand you need to advertise. Not a sermon about what anyone should eat.

Safety. No shaming food. No body talk. No diet crusade. Aisle courtesy if you do the cousin in a shop.

The fun. Turning the box. Catching what the front promised and the side listed.

The skill. Claim versus list. Missing information. “Best” according to whom.

How to run it. Read the front word. “What do you mean, *best*?” Turn the box. What does the side list? What is missing that you would need, if you wanted to check? Another box on the shelf is a check, if you have one. The box is a speaker. Speakers can be incomplete. Repeat the check — the side, the other box — not the rumor “best” in a singsong.

5–7. One word. One turn. One “who wrote that?”

8–10. Front versus side. Serving size on two boxes, if two boxes are already there. “Serves 4” on a small tin. Still not a food-policy hour. Still not a culture-war about nutrition.



Figure 12: Two plates, two cloths, a bowl of water, a generic box turned to its side panel, a notebook. No child, no logos.

Try-it 4 — Trophy versus sneakers, toys

Time. 5–10 minutes, after a race or a game that already happened.

Materials. A visible marker (a ribbon, a block on a “finish,” a drawing of first place) and a plausible why (fast shoes, a lucky hat, a bigger push).

Safety. Ordinary play. No humiliation of the child who did not win.

The fun. Telling the story of the race, then catching which part is how-we-know.

The skill. How versus why. “How do you know she won?” is not “why might she have won?”

How to run it. Ask how they know who won. Wait. If they offer fast sneakers, point at the marker. “That might be why. How do we know *this* time?” Both questions can be asked. They are not the same question. Do not treat a clean trophy answer as “they now have scientific method.” The distinction is still limited and still local.⁷⁹

5–7. Point at the ribbon. Short sentence.

8–10. Ask both questions on purpose, in either order, and notice which one they answered.

Try-it 5 — Namer who was wrong yesterday

Time. 5 minutes.

Materials. A new kitchen gadget, or a toy with a name the child does not yet have. Two namers: a parent and a sibling, or two labelled cards, one of which was wrong yesterday on a different object.

Safety. Ordinary talk. The “wrong namer” is a role in a game, not a verdict on a person. No identities as the object of the test.

The fun. Catching who was careful. Still looking.

The skill. Whom do you ask? Take a previously careful speaker seriously. Still check if you can.

How to run it. Yesterday, one namer called the whisk a fork. Today a garlic press, or a new puzzle piece, sits on the table. “Whom do you want to ask?” After they pick, you can still look at the object, or open the drawer where the picture of it

⁷⁹Deanna Kuhn and Susan Pearsall, “Developmental Origins of Scientific Thinking,” *Journal of Cognition and Development* 1 (2000): 113–129. Between about 4 and 6, the distinction between a theory that makes an event plausible and evidence that it occurred develops rapidly and remains incomplete. Trophy versus sneakers: “How do you know he won?” answered “because he has fast sneakers” instead of “he’s holding the trophy.” Prompted 4-year-olds mean 1.87/6 evidence answers; 6-year-olds 4.19/6; adults 6.00/6. Most of the time, still limited. Deanna Kuhn, “How Do People Know?,” *Psychological Science* 12, no. 1 (2001): 1–8, on young children’s difficulty differentiating an explanation of why a claim makes sense from evidence that the claim is true.

lives, or wait until you see it used. Selective trust is already there. The next move is reason plus check, not “trust no one.”⁸⁰

5–7. One new object. One “whom do you ask?” Then look.

8–10. “She was careful yesterday. Today she said X. We can still look.” That is not suspicion as a personality. That is a check.

Try-it 6 — Out-of-home cousin: playground fair-ish test

Time. 10 minutes of a park visit you were making anyway.

Materials. A ball, a chalk line, or two throwing spots. The cue sentence: “this is like the ice.”

Safety. Other children; roads on the way; ordinary park sense. This is not a science-fair takeover of the playground. You do not lecture a stranger’s child. You do not confiscate someone else’s ball for a test. One change: who throws *or* which ball — not both.

The fun. One throw that might go farther. Catching that two changes at once would spoil the tell.

The skill. One change, cued from the kitchen. Near transfer needs a cue. Far transfer to an unseen later problem is not the promise.⁸¹

How to run it. “If we want to know whether the bigger ball goes farther, what is the one thing we change? Who throws stays the same. Spot stays the same.” Look. Then stop. The park is still a park.

⁸⁰Melissa A. Koenig, Fabrice Clément, and Paul L. Harris, “Trust in Testimony: Children’s Use of True and False Statements,” *Psychological Science* 15, no. 10 (2004): 694–698; Fabrice Clément, Melissa A. Koenig, and Paul L. Harris, “The Ontogenesis of Trust,” *Mind & Language* 19, no. 4 (2004): 360–379. When they could identify who had been reliable, children showed selective trust; most four-year-olds also ignored a hitherto reliable informant whose claim conflicted with what they themselves had seen. Melissa A. Koenig and Paul L. Harris, “Preschoolers Mistrust Ignorant and Inaccurate Speakers,” *Child Development* 76, no. 6 (2005): 1261–1277 (abstract opened). Paul L. Harris and Melissa A. Koenig, “Trust in Testimony: How Children Learn about Science and Religion,” *Child Development* 77, no. 3 (2006): 505–524. This chapter uses the namer-and-look type. It does not use religious case studies as exercises.

⁸¹Daniel T. Willingham, “Critical Thinking: Why Is It So Hard to Teach?,” *American Educator*, Summer 2007. Thinking is not a bicycle skill you apply in any situation; processes are intertwined with content. Near practice on ice does not, by itself, install unaided judgment on an unfamiliar later problem. Cue the similarity (“this is like the ice”).

5–7. You name the one change. They throw, or they watch.

8–10. They name it. They catch you if you “help” one throw.

Blocked practice is the first ice, the first cloths, the first jar — the new move on one object. Mixed practice is the same week’s box, snack, and playground cousin, so the move is not glued to melt. One incorrect example to diagnose, every week: a wish offered as a reason, or a fluent “the box says best” with no turn of the box. Hear it. Ask a better question. Then look.

Talk box

Opening. “What is the one thing we changed?”

Not: “Define a controlled variable.” Not: “Did you have fun?” Not: “What is the vocabulary word?”

Follow-ups.

1. What did we keep the same?
2. What did you see?
3. Can we tell for sure?
4. What else could be true?
5. What would make you change your mind? You may change your mind.

How to wait. After you ask, a slow three. Three seconds is a convention from classroom think-time, not a sacrament and not a homeschool trial.⁸² After they stop, wait again. If they are mid-reason, let them finish. Look at the ice, the cloth, the box, or the window, not at the child, if the silence is hard. A science-class finding about wait-time is a useful picture of adult hurry. It is not a study of your kitchen.⁸³

⁸²Robert J. Stahl, “Using Think-Time and Wait-Time Skillfully in the Classroom,” ERIC Digest ED370885 (1994). Think-time; about three seconds as a convention, not a sacrament; written for classroom teachers. A parent can use the move. The parent is not replicating a homeschool wait-time trial; none was opened for this book.

⁸³Mary Budd Rowe, papers on wait-time in elementary science class (NARST 1972 / ERIC ED061103; *Journal of Research in Science Teaching*, 1974). Typical waits of about one second after a question and about 0.9 seconds after an answer; extending both to 3–5 seconds changed discourse. Setting: science class, video-taped lessons. Useful as a picture of adult hurry. Not a homeschool randomized trial and not evidence that wait-time teaches generic critical thinking.

Stuck silence usually means: they changed two things and can feel the mess; they reported the hope and are waiting to see if you wanted that; they collapsed how and why; the question was vague; wait-time 1 was zero; they are searching for a word; they are guessing what you want; the question was a recitation item in disguise (“what is a variable?”). Pose, wait, and point back at the object. Filling the silence with the right answer is a rescue. Turning the table into a fight is a different failure. Stop if it is a fight. Postpone. Pick a smaller claim.

For the student

You already think about snacks, ice, toys, and boxes. This sitting is a way to look on purpose.

A *claim* is a sentence that might be true or not. “There are three.” “This cloth soaks more.” “Best.”

A *one-change check* is when we change one thing, keep the rest the same, and look. If we change two things, we cannot tell which one did the work.

A *wish* is what you want. A *look* is what you see. They are allowed to be different. You may change your mind when the look goes the other way. That is not losing.

Tiny worked example.

Claim: *Sun makes ice melt faster.*

One thing we change: *light — one plate in the sun, one in the shade.*

What we keep the same: *same size cubes, same kind of plate, same starting time.*

What we saw (illustration, not a report from a real kitchen): *the sunny one is a puddle; the shady one is still a lump.*

So we can say: *on these plates, the sunny cube melted more. We can tell it was the light because size, plate, and time stayed the same.*

If we had used a bigger cube in the sun, we could not tell.

Two tries.

1. Two cloths. Same bowl of water. One cloth is thick, one is thin. What is the one thing you are changing? What will you keep the same? What will you look for?

2. Someone says there are three cookies left. You want there to be three. How could you check? What will you say if the jar has two?

Explain it back. Tell someone at the table, in your own words, what a one-change check is. Then point at the ice, or the cloths, or the jar, and say how you know.

Challenge. A toy race just finished. One person is holding a ribbon. Someone says they won because their sneakers are fast. Ask two questions: how do you know they won *this* time, and why might they have won? Which question did the sneakers answer?

You are allowed to wait. You are allowed to be wrong and then look. You write, or you say, the new sentence. A tool does not look in the jar for you.

If it isn't clicking

Three diagnostics. Each one has a next move. None of them is a verdict on talent. None of them is a reason to wait for a birthday.

1. Two things keep changing, and the claim still sounds sure.

The one-change rule is not yet in the mouth. Next move: you set both versions on the table — a clean pair and a messy pair. “Can we tell for sure?” Wait. Smaller materials: two ice cubes that really are the same size. Slow down. Stay on melt or soak until they can catch the extra change. Go ahead to the box and the playground cousin once “what is the one thing we changed?” is easy. A human tutor is optional here; the materials are cheap. Bring someone in if several weeks of short sittings still end in a two-things claim *and* the hour has become a fight.

2. Every reason is a wish or a sad-ice story.

A look was asked for; a hope or a picture arrived. Next move: point at the object. “What did you see?” Count the cookies. Touch the cloth. Name, if needed, a better reason: ice melts when it gets warmer. Hearing is not endorsing. Correcting the reason is not shutting the child down. Stay on snack and ice, where the look is cheap. Go ahead to “best” on a box once a wish is hearable as a wish. A tutor is useful if the sitting is stuck on stories after you have pointed at the object, consistently, and the child is distressed — distress from a well-posed look is effort; distress from a parent who has taken the cube is a different problem. Separate them.

3. The box, the namer, or the trophy is treated as magic proof.

“It says best.” “She always knows the names.” “Fast shoes, so she won.” Fluent, and no check. Next move: leave this sentence and look at one other thing. Turn the box. Look at the ribbon. Look at the gadget. Take the careful namer seriously, then still look. This is not a personality transplant into suspicion. It is one other thing. Slow down the “whom do you ask” sitting until looking is allowed. Go ahead to the playground cousin once the kitchen check is a habit. A tutor is not the first move; the object is.

When to slow down. One-change not yet named. Wish still the default answer to “how do you know?” Fight at the table. Those are brakes. Age is not a brake.

When to go ahead. They can name the one change. They can look in a jar and change the sentence. They can turn a box. Then the walk, the store, and the park in the next chapter have somewhere to sit.

When to get a human tutor. You cannot yet hear a wish-as-reason, even after the five-minute warm-up. Or the child has weeks of short sittings, and the unaided sentence is still a hope with no look. Or the hour is a fight. A tutor is a release valve, not a failure of the kitchen. Keep yourself as the person who can still hear “because I want three.”

Tools, including AI

Optional helpers for you, the adult. The full rules live in the thinking-hour box in the front of this book. This chapter is a pointer, not a second policy paper.

The child talks to you. The child looks at the ice, the jar, the box. You may, on your account, after they have tried, ask a tool to explain this page to you, to offer extra questions you will vet, to write a short SCRIPT for *you* to say, to give a hint after an attempt, or to diagnose a reason they already gave. You hear the diagnosis and you decide.

The child does not sit alone with an open chat. A tool does not look in the jar. A tool does not invent whether the shop is closed, what is in the box, or who won the race. A fluent reason from a machine is performance, not the child’s check. Detectors are not a grade. There is no certificate of thinking to print.

Ages 5–10: scripts and parent-child talk, not live open chat. Keep accounts on

your side of the table. A thinking tool is not a secret friend.

What “done enough” looks like

Done enough is skill, not a birthday, and not a course called Lab Thinking 1. If a Pennsylvania log needs a science line, “ice / one-change / looked” is a science line. The title a stranger can read is still **Science**, or **Reading** if the work was a box and a word. It is not Critical Thinking I.

Checklist before moving on.

- Names the one thing that changed, and at least one thing that stayed the same.
- Looks, then says what they saw, not only what they hoped.
- Hears a wish or a sad-ice story and, with a question, gets to a look.
- Turns a box and treats “best” as a word someone wrote.
- Separates, at least when you cue it, “how do we know she won?” from “why might she have won?”
- Takes a careful namer seriously and still looks if looking is cheap.
- Changes the sentence when the look goes the other way, without treating that as losing.
- On a playground cousin, can use the cue “this is like the ice.”

What can still be thin: unaided far transfer to a new kind of problem with no cue; a multivariable coordination; a paragraph instead of a sentence at five to seven. Those can wait. They are not a window that closed.

A parent who felt rusty should be able to say, after this chapter: I understand one-change. I know what to say tomorrow. I know what a wish-as-reason sounds like. The student still looks. We can do this.

A student should be able to say: I know what to try. I am allowed to wait. I can change my mind when we look.

Chapter 6

Outside the home



Figure 13: A park bench, a puddle, a generic park sign, a small stack of unmarked books. No child, no logos.

Why this matters

What do you notice?

That question unlocks a walk you were taking anyway. A store you were already in. A park you repeat. A library card already in a pocket. Outside the home is not a purchased identity. It is not a franchise called Outdoor Philosophy 1. It is the same moves as the kitchen — notice, name, wonder, a cheap check — on a larger floor.

The walk is already happening. “Is that ice or water? How do you know?” “What else could make the puddle?” Safe stakes. Weather as weather, not a policy seminar. A package in an aisle as a sentence on cardboard, not a sermon about food. A library hour as a free sit with a book the child chose. A museum as looking at **one** object, not a day of rooms. A park as “what changed since last time?” A shop door as the check on “my friend said closed.”

A walk is none of the outdoor programmes people sometimes mash into “thinking outside.” Forest School is a named school treatment. The completed effectiveness trial of Forest School as critical thinking is not a finding this book can copy, and a parent walk is not that treatment.⁸⁴ Attention-restoration studies are about attention and symptoms. They are not this chapter. The honest out-of-home type is: notice, name, wonder, check if checking is cheap and safe. Noticing is not foraging school.

The library is the opened low-cost path. In 2016, 66 percent of homeschool households used the library as a source of curriculum and books.⁸⁵ A public library’s mission language includes exploratory conversation; that is a mission, not a trial

⁸⁴Parent walks are not Forest School trials. Mel McCree, Roger Cutting, and Dean Sherwin, “The Hare and the Tortoise: A Fable of Forest School and Attainment,” and related small mixed-methods work (n = 11 in McCree, Cutting, and Sherwin, 2018) are not randomized trials of critical thinking. The FINCH protocol (2025) is a *feasibility* cluster RCT of Forest School for KS2 mental health, not completed as an effectiveness trial on critical thinking as of 1 September 2026; the protocol itself notes the absence of published Forest School RCTs. Quibell, Charlton, and Law (2017), “Wilderness Schooling,” is an RCT of a structured curriculum-based outdoor programme, not Forest School. This chapter teaches notice–name–wonder–cheap check on a walk you were taking anyway.

⁸⁵National Center for Education Statistics, *Parent and Family Involvement in Education: 2016* (NCES 2020-001), Table 6. Among homeschool households, 66 percent used the library as a source of curriculum and books. 2023 subject-source tables were not republished in the First Look opened for this book. Access date for sources in these notes: 1 September 2026.

of a thinking kit.⁸⁶ Storytime is already on the calendar. A parent who stays for the questions after the book has used the free hour. Librarians do not stand in for you on what your child reads. You still pick the book and the prompt.

That is worth the struggle because the world already offers claims. A grey sky. A sign. A friend's sentence. A label. Each one can be a wish, a memory, or a look. The parent who can carry one named question on an errand they were running anyway can teach this week. The child who can stop, name one thing they notice, say how they know, and name one other thing it could be has practiced deciding what to believe on a domain under their feet.

This week you can learn how a walk they were taking anyway can carry one named question, and how to leave a friend's sentence for a door. Today the student can stop on a walk, name one thing they notice, say how they know, and name one other thing it could be.

For the parent: understand it yourself

You do not need to be a naturalist. You do need to hear "because I want it to rain" as a wish, not a look at the sky, and "Maya said closed" as a sentence that still has a door.

Everyday picture. You are already walking to the corner. A puddle. A stick. "Is that ice or water?" If you fill the walk with a lecture on weather words, the child will hunt for the word you want. If you ask what they notice, wait, and look closer, they have something to think about. The walk stays a walk. Ten extra minutes is plenty. Forty minutes of a branded outdoor hour is a load even schools with trainers did not all keep.⁸⁷

⁸⁶New York Public Library mission language includes inspiring lifelong learning and engaging in exploratory conversations (nypl.org/about/mission, opened 1 September 2026). American Library Association, Library Bill of Rights: libraries are forums for information and ideas; a person's right to use a library should not be denied because of age. ALA interpretation on library-initiated programs: parents and guardians may decide whether their own children participate. Mission and interpretation, not a Philosophy for Children trial.

⁸⁷Education Endowment Foundation / NFER, Philosophy for Children effectiveness trial (2021): 198 schools; 35 of 75 intervention schools were not implementing at the expected level after two years; six did not implement at all. A load finding: even schools with trainers did not all keep the hour. A tired parent will not keep a 40-minute outdoor franchise more faithfully by buying a pin. Short and repeatable is the honest home dose. Whenever Philosophy for Children is named, copy also the attainment result: 0 months extra progress on FSM reading and on whole-cohort reading in

Precise picture. *Notice* is the first look: what is there. *Name* is a word you already have, or a honest “I don’t know yet.” *Wonder* is a question that could come out otherwise: what else could make this puddle? *Check*, if it is cheap and safe: look closer; come back after rain; read the sign; walk to the door; open a book you trust later; ask a ranger, not a stranger’s child. Knowledge first. A maxim about “thinking like a scientist” without the puddle will not implement.⁸⁸

The store is the same shape with cardboard. What does this package say? What does that word mean? What is missing? How could we check? Three to eight minutes in a shop you were in. One package. Aisle courtesy. The box is a speaker. Speakers can be incomplete. This is not a nutrition hour.

The library is a free thinking hour. Why this book — cover, blurb, contents — then the talk you already know from picture books. If the display is a live fight, walk to a different bay. You still pick the prompt.

The museum is looking, not a franchise. One object. One label. One question. The label is a claim. What can you see? What would you still need to know?

The park is memory versus look. What changed since last Tuesday? How do you know?

The shop is testimony versus the door. Take the friend seriously. Still leave the sentence for the hours posted, or for the handle.

Wrong answers you should be able to hear

1. The “right” nature word. “It’s precipitation.” They are watching your face.

What it usually means. The walk became a recitation. They are hunting for the word you want.

What to say. “What do you notice? How do you know it’s ice, or water, or something else?” Then look. The word can come after the look, or at the moment the look needs it.

that 2021 trial (5/5 padlock). Gorard, Siddiqui, and See (2015) found about +2 months in reading and maths in a smaller efficacy trial that did not replicate at effectiveness scale.

⁸⁸Daniel T. Willingham, “Critical Thinking: Why Is It So Hard to Teach?,” *American Educator*, Summer 2007; “How to Teach Critical Thinking,” NSW Department of Education occasional paper, 2019. Maxims without knowledge will not implement. Cue near similarity (“this is like the shop,” “this is like the jar”). Far transfer is not the default.

2. A friend's sentence as the world. "Maya said the shop is closed." You are standing in front of the door.

What it usually means. Testimony arrived, which is information. The check is still the door. Children already weigh speakers. The next move is reason plus look, not "trust no one."⁸⁹

What to say. "Maya might be right. How could we check?" Walk to the door. If they later say "but Maya said," repeat the **door**, not Maya's sentence in a singsong.⁹⁰

3. The sign they remember, not the sign that is there. "Dogs can go on the grass. That's the rule." The sign says the other thing.

What it usually means. Memory filled in. Fluent. Not a look.

What to say. "What did the sign actually say?" Walk to it. Point.

4. A package sermon. "This one is bad. That one is good." Or a long talk about what people should eat, while the box sits unturned.

What it usually means. A culture-war, or a health lecture, ate the claim-check. The sitting was supposed to be a word on cardboard.

What to say. "What does this side say? What does that word mean? What is missing?" Turn the box. Stop. Three to eight minutes.

5. Noticing as a wilderness identity. "We do Forest School on Tuesdays." The walk was already happening. The kit was the point.

What it usually means. A purchased story replaced a cheap look. A walk you were taking anyway does not become a trial because it has a name.

What to say. Keep the walk. One question. A cheap check. Then the errand continues.

⁸⁹Paul L. Harris and Melissa A. Koenig, "Trust in Testimony," *Child Development* 77, no. 3 (2006): 505–524; Koenig, Clément, and Harris (2004); Clément, Koenig, and Harris (2004). Children already weigh speakers. The next teaching object is the reason and the check. This chapter uses shop doors, signs, and weather. It does not use religious or political testimony as exercises.

⁹⁰Stephan Lewandowsky, John Cook, Ullrich K. H. Ecker, et al., *The Debunking Handbook 2020*. Backfire effects occur only occasionally; continued influence is the sticky problem; repetition can increase judged truth. Translation for this age: repeat the check (the door, the sign, the window), not the rumor in a singsong. A translation of the handbook onto a shop-claim, not a 5–10 randomized trial of the handbook.

Five-minute parent warm-up

Before you go out, or in the car before you park:

1. Name tonight's place in one word: walk, store, park, library, museum, shop door. Write one opening question you do not already have a recitation answer for. "What do you notice?" is enough.
2. Name the cheap check if there is one: look closer, read the sign, turn the box, walk to the door, come back after rain. If the check is not cheap or not safe, tonight is notice-and-wonder only.
3. Say the opening out loud. Wait a slow three. Look at the windshield, not at an imaginary child, if the silence is hard. Three seconds is classroom think-time as a convention, not a study of your sidewalk.⁹¹

If those three are fluent, you can hear a recitation-word, a friend's sentence standing in for a door, and a lecture filling the walk. That is the job. The child still notices.

How to teach it this week

Use the thinking-hour shape: warm-up, short model, student attempt, one good question, mixed practice, exit ticket. Fill it with a walk, a puddle, a box, a bay of books. Stop while you are still on an errand, not a field course.

Warm-up (2–3 minutes), at the door. Yesterday's kitchen one-change, from memory. "What did we change? What did we see?" Then: "Outside we will notice, and we will look at one other thing if we can." No new lecture on nature.

Short model (3–8 minutes of the walk you were taking). You stop at a puddle or a bench. You ask what you notice. You wait. You name one thing. You ask how you know. You name one other thing it could be. You do a cheap check if there is one — look closer, dip a stick, read a sign. Then you start walking again. The model is short on purpose. A walk filled with your monologue is a lecture in sneakers.

Exact wording you can steal.

⁹¹Robert J. Stahl, "Using Think-Time and Wait-Time Skillfully in the Classroom," ERIC Digest ED370885 (1994). About three seconds as a convention, not a sacrament. Classroom origin. A parent can use the move on a walk.

On noticing: “What do you notice?”

On knowing: “How do you know it’s a...?”

On else: “What else could it be?”

On the check: “How could we check?”

On a sign: “What did the sign actually say?”

On a friend: “They might be right. How could we check?” Then, later: “We looked at the door.”

On a box: “What do you mean, *best*? What does the other side say?”

On the library: “Why this book? What did the cover, or the blurb, or the first page, actually show you?”

On the museum: “What can we see? What does the label claim? What would we still need to know?”

On mind-change: “You thought X. We looked. You can say the new thing.”

Student attempt. After the model, the next stop is theirs. Product: one notice, one how-do-you-know, one else, optional cheap check. You wait. You do not fill the puddle with the right nature word.

One good question. After the attempt: “If we had not stopped, what would we have missed — and how do you know it is that, not the other thing?”

Mixed practice. Same week: one store-label, one library browse, one “what changed” at a repeated park, if those errands are already happening. Mix, so noticing is not glued to puddles.

Exit ticket (1–3 minutes), on the way home. “What did you notice? How did you know? What else could it have been?” Spoken is enough. At eight to ten, a dated line: place, notice, check. Tool closed.

How to fade help. You stop and you ask → they stop and you ask → they stop and they ask the how-do-you-know → they choose the cheap check. When they can notice without hunting for your word, put the nature-vocabulary list away. Bring a cue back when a new place arrives — “this shop door is like the jar.”

When to stop talking. After one stop and one question. The walk is still a walk. You hold the key: notice, how do you know, what else, cheap check. You do not

become a tour guide of every tree.

Age-band moves

5–7. One stop. One notice. How-do-you-know is near: ice or water, grey sky or rain on the window, a door open or shut. Speech is talk. The library pick is a cover they like, then one question on a page they understood. Store-label is one word, one turn. Museum is one object, then a snack. Public quiet: no interrogation of other children at the bus stop.

8–10. Same moves, slightly heavier grain. They can hold “what else could it be?” They can read a jacket, a sign, a box. They can ask what the label claims and what they can see. Wait can include one line in a notebook. They can leave Maya’s sentence for the door and, later, repeat the door. They still hunt for your word if you lecture. They still need the object.

Placement is by skill, not birthday. A ten-year-old who only recites nature words is still in the 5–7 band of this chapter. A six-year-old who says “it might be a puddle from a sprinkler, not from rain — we could come back after it rains” is already practicing the else-and-check. A publisher’s outdoor workbook grade is a scope, not a legal grade.

Practice that actually builds learning

Named try-its. Time, materials, safety, the fun, the skill. Out-of-home is this chapter’s centre. The kitchen cousin is here so the move can travel back inside.

Try-it 1 — Walk noticing

Time. 5–20 minutes of a walk you were taking anyway.

Materials. Eyes. Optional: one notebook mark.

Safety. Roads, water, unknown plants, other people’s dogs. Noticing is not foraging school. No tasting unknown things. No lecture to a stranger’s child.

The fun. Stopping. Being allowed not to know the name yet.

The skill. Notice, wonder, criteria, else, check (look closer; look it up later in a book you trust; ask the ranger; come back after rain).

How to run it. Stop once. “What do you notice?” Wait. “How do you know?” “What else could it be?” Cheap check if there is one. Then walk. One stop is a sitting. Five stops is a tour.

5–7. You choose the stop. They name what they see.

8–10. They choose the stop. They name the else. They suggest the check.

Try-it 2 — Puddle / weather check

Time. 5–15 minutes.

Materials. A puddle, a stick, or just looking at the sky and then the window.

Safety. Depth; cold; lightning — go in. Ordinary wet shoes. Not a climate-policy seminar. Weather as weather.

The fun. Poking. Being right or changing your mind ten minutes later.

The skill. Change over time. How do you know it will rain? Grey sky versus looking out the window, then looking again.

How to run it. “Will it rain?” is a prediction. “Is it raining?” is a look. Those are different. Grey sky is a clue. The window is a check. Come back in ten minutes. “I thought it was raining; we looked; it is not.” Allowed.

5–7. Look now. Short sentence.

8–10. Predict, look, wait, look again. One line: old view, new view.

Try-it 3 — Store-label looking

Time. 3–8 minutes in a shop you were in.

Materials. One package. Safe examples: two cereal boxes with different serving sizes; a “serves 4” soup that is clearly a small tin; a picture of fruit on a yoghurt that lists fruit *flavour*. Generic looking. No living brand you need to advertise.

Safety. Aisle courtesy. No lecture to strangers. Don’t eat from an open demo. Don’t shoplift a “test.” No shaming food. No body talk. No diet crusade.

The fun. Turning the box in a shop.

The skill. Claim versus evidence. Missing information. The box as a speaker.

How to run it. One package. Front word. “What do you mean?” Side list. What is missing? Another box if it is already on the shelf. Then put it back, or buy the thing you came for. Stop.

5–7. One word. One turn.

8–10. Front versus side. Serving sizes if two boxes are there. Still not a food-policy hour.

Try-it 4 — Library browse-and-talk

Time. 10–20 minutes.

Materials. One chosen book. A library card.

Safety. Ordinary library rules. You still pick the prompt. If the display is a live controversy, walk to a different bay. Parents decide for their own children; a library programme is not in loco parentis on that point.⁹²

The fun. Choosing among three safe books.

The skill. Why this book (cover, blurb, contents); then picture-book talk. In-home cousin: the same book on the sofa tomorrow.

How to run it. Three books. Why this one? Open it. One question about what a character sees, or whether someone might be mistaken, or how we could check a picture against another page. Stay. The free hour is the stay, not the checkout stamp alone.

5–7. Cover plus one page.

8–10. Blurb or contents plus a heavier question they can still point at.

New York’s later grades mention library skills on a regular basis in the thick-state list. That is a reminder that libraries exist in the school map, not a critical-thinking course, and not a requirement at five to ten. They still have the public library.⁹³

⁹²New York Public Library mission language includes inspiring lifelong learning and engaging in exploratory conversations (nypl.org/about/mission, opened 1 September 2026). American Library Association, Library Bill of Rights: libraries are forums for information and ideas; a person’s right to use a library should not be denied because of age. ALA interpretation on library-initiated programs: parents and guardians may decide whether their own children participate. Mission and interpretation, not a Philosophy for Children trial.

⁹³8 NYCRR 100.10 (New York home-instruction regulation): grades 7–8 include library skills

Try-it 5 — Museum as looking

Time. 10–20 minutes at **one** object.

Materials. The object and its label.

Safety. Hands off if that is the rule. Crowds. Fatigue — one object, then a break. No lecture to other visitors' children.

The fun. The thing itself.

The skill. Label as a claim. What you can see. What you'd still need to know. "How would we know if the date is right?" only if the child has some date-knowledge. Knowledge first.

How to run it. Pick one. Look. Read the label. "What can we see? What is the label saying? What would we still need?" Then stop. A museum as a franchise of rooms will erase the look.

5–7. See, then one "what do you notice?"

8–10. See, label, gap. Still one object.

Try-it 6 — Park "what changed"

Time. 5–10 minutes in a place you repeat.

Materials. A bench, a puddle, a tree, a sign you have seen before.

Safety. Ordinary park sense. Roads. Dogs. Other children — you do not run a test on them.

The fun. Catching that the puddle is gone, or the sign is new.

The skill. Memory versus look. How could we check.

How to run it. "What is different since last time? How do you know? What would we look at to be sure?" If they remember a closed slide and the slide is open, the look wins. They may change their mind.

5–7. One thing that changed.

8–10. One thing that changed, one thing that did not, how they know.

on a regular basis. That is a thicker-state reminder, not a critical-thinking course, and not a 5–10 requirement. Grades 1–6 required subjects do not name critical thinking.

Try-it 7 — “My friend said the shop is closed”

Time. As long as the errand.

Materials. The door, the hours, a grown-up who was just there if you need a third check.

Safety. Ordinary street sense. You do not confront Maya. You do not turn a friend’s honest mistake into a character lesson in public.

The fun. Being the person who checks the door.

The skill. Testimony versus the door. Take Maya seriously. Still leave the sentence for the handle. Repeat the check, not the rumor.⁹⁴

How to run it. “Maya said closed. She might be right. How could we check?” Walk. Look at the hours. Try the door if that is lawful and safe. Later, if “but Maya said” returns, say “we looked at the door,” not a singsong of Maya’s sentence.

5–7. Walk to the door. Short sentence.

8–10. Door, hours, maybe a grown-up who was just there. Still the door first.

⁹⁴Stephan Lewandowsky, John Cook, Ullrich K. H. Ecker, et al., *The Debunking Handbook 2020*. Backfire effects occur only occasionally; continued influence is the sticky problem; repetition can increase judged truth. Translation for this age: repeat the check (the door, the sign, the window), not the rumor in a singsong. A translation of the handbook onto a shop-claim, not a 5–10 randomized trial of the handbook.



Figure 14: A sidewalk puddle, a stick at rest, a generic shop-hours plaque, no people, no logos.

Try-it 8 — Kitchen cousin: package on the counter

Time. 3–8 minutes at home.

Materials. One box already bought.

Safety. No shaming food. Same rule as Chapter 5.

The fun. The same turn of the box, without an aisle.

The skill. The store move, practiced where you can wait longer.

How to run it. Front, side, missing information. Cue: “this is like the shop.” Near transfer needs a cue.⁹⁵

⁹⁵Daniel T. Willingham, “Critical Thinking: Why Is It So Hard to Teach?,” *American Educator*,

Blocked practice is the first puddle, the first door, the first bay of books. Mixed practice is the same week's store and park, so noticing is not glued to weather. One incorrect example to diagnose: a recitation nature-word, or "Maya said" with the door untried. Hear it. Ask a better question. Then look.

Talk box

Opening. "What do you notice?"

Not: "What should you notice?" Not: "What is the vocabulary word?" Not: "Did you have fun?"

Follow-ups.

1. How do you know it's a...?
2. What else could it be?
3. How could we check?
4. What did the sign actually say?
5. You may change your mind when we look.

How to wait. After you ask, a slow three.⁹⁶ After they stop, wait again. If they are mid-notice, let them finish. Look at the puddle, the sign, the door, or the book, not at the child, if the silence is hard. You are not replicating a science-class wait-time study on the sidewalk.⁹⁷

Stuck silence usually means: they are hunting for the "right" nature word; wait-time 1 was zero; you filled the walk with a lecture; the question was a recitation item in disguise; they offered a wish ("I want it to rain") where a look was asked for; they think noticing means pleasing you. Pose, wait, point at the thing. Rescue is naming the tree for them before they have looked. A fight on the sidewalk is a reason to walk home and try a smaller claim later.

Summer 2007; "How to Teach Critical Thinking," NSW Department of Education occasional paper, 2019. Maxims without knowledge will not implement. Cue near similarity ("this is like the shop," "this is like the jar"). Far transfer is not the default.

⁹⁶Robert J. Stahl, "Using Think-Time and Wait-Time Skillfully in the Classroom," ERIC Digest ED370885 (1994). About three seconds as a convention, not a sacrament. Classroom origin. A parent can use the move on a walk.

⁹⁷Mary Budd Rowe, wait-time in elementary science class (NARST 1972 / JRST 1974). Useful as a picture of adult hurry. Not a homeschool randomized trial of sidewalk noticing.

For the student

Outside is the same looking as the kitchen, with a bigger floor.

Notice is what is there. You do not have to know the name yet.

How do you know? is the next sentence. Ice looks hard. Water moves when you poke it. A door that opens is not closed.

What else could it be? keeps you from grabbing the first idea. A puddle might be rain. It might be a sprinkler.

Check, if it is safe and small: look closer, read the sign, walk to the door, come back later.

A friend's sentence is information. It is not yet the door.

Tiny worked example.

On a walk (illustration, not a reported family): you stop at a shiny patch on the pavement.

Notice: *It looks like ice.*

How do you know: *It is shiny and it does not move when I look.*

What else: *It could be water. It could be a wet leaf.*

Check: *Poke with a stick. It splashes. It is water.*

You thought ice. You looked. You can say water. That is not losing.

Two tries.

1. Stop on a walk. Name one thing you notice. Say how you know. Name one other thing it could be.
2. Someone says the shop is closed. You are on the way there. How could you check? What will you say if the door opens?

Explain it back. Tell someone what “what do you notice?” is asking for. Then point at a puddle, a sign, or a door, and say how you know.

Challenge. At a park you have been to before, name one thing that changed and one thing that did not. How do you know? What would you look at to be sure?

You are allowed to wait. You are allowed not to know the name yet. You may change your mind when you look. A tool does not walk to the door for you.

If it isn't clicking

Three diagnostics. Each one has a next move. No shame. Placement is by skill, not birthday.

1. They hunt for your word, or you filled the walk.

Noticing became recitation. Next move: one stop. One question you do not already have the sentence for. Wait. Look at the puddle if the silence is hard. Put the nature-word list away for a week. Slow down until “what do you notice?” gets a look, not a performance. Go ahead to signs and jackets once a notice is a notice. A tutor is optional; the sidewalk is free. Bring someone in if walks have become a fight.

2. A friend's sentence, a memory, or a label replaces the look.

“Maya said.” “The sign says we can.” “It will rain because I want it to.” Next move: leave this sentence and look at one other thing — the door, the actual sign, the window. Repeat the check, not the rumor. Stay on doors and windows, where the look is cheap. Go ahead to museum labels once testimony-versus-look is hearable. A tutor is not the first move; the door is.

3. The outing became a kit, a tour, or a gotcha.

Forty minutes of programme. Every tree named. A test designed to trap a shop or a neighbour. Next move: shrink. One stop. One package. One object. Aisle courtesy. The errand continues. This book's outside hour is short and repeatable because even trained school hours were hard to keep.⁹⁸ Slow down the ambition. Go ahead to mixing store and library once one stop is easy. A tutor is the wrong object here; the load is the object.

⁹⁸Education Endowment Foundation / NFER, Philosophy for Children effectiveness trial (2021): 198 schools; 35 of 75 intervention schools were not implementing at the expected level after two years; six did not implement at all. A load finding: even schools with trainers did not all keep the hour. A tired parent will not keep a 40-minute outdoor franchise more faithfully by buying a pin. Short and repeatable is the honest home dose. Whenever Philosophy for Children is named, copy also the attainment result: 0 months extra progress on FSM reading and on whole-cohort reading in that 2021 trial (5/5 padlock). Gorard, Siddiqui, and See (2015) found about +2 months in reading and maths in a smaller efficacy trial that did not replicate at effectiveness scale.

When to slow down. Recitation-words. No cheap check ever. Fight on the side-walk. Those are brakes. Age is not a brake.

When to go ahead. They can notice, say how they know, name an else, and use a door or a sign as a check. Then disagreement in the next chapter has somewhere to sit — a swing, a shop, a park sign.

When to get a human tutor. You cannot yet hear a recitation-word or a Maya-sentence, even after the warm-up. Or every outing is a fight. A tutor who will walk and wait is a reasonable valve. Keep yourself as the person who can still ask “what do you notice?”

Tools, including AI

Optional helpers for you. The full rules live in the thinking-hour box in the front of this book. This chapter points back.

The child talks to you on the walk. The child looks at the puddle, the sign, the door. After they have tried, you may ask a tool to explain this page to you, to offer extra questions you will vet (throw out any that import a live controversy, a secret, or a pretend expert), to write a SCRIPT for you to say, to give a hint after an attempt, or to diagnose a reason they already gave.

A tool does not invent whether the shop is closed, who was at the park, or what a sign said. The child does not sit alone with an open chat on a path. A fluent nature paragraph from a machine is not their notice. Detectors are not a grade. There is no certificate of outdoor thinking.

Ages 5–10: scripts and parent-child talk, not live open chat. Accounts stay on your side. A thinking tool is not a secret friend on the walk.

What “done enough” looks like

Done enough is skill on an errand, not a course called Outdoor Philosophy 1, and not a Forest School identity. The title a stranger can read, if a title is needed, is still **Science** (weather, a puddle), **Reading** (a library book, a label), or the walk as ordinary life. It is not Critical Thinking I.

Checklist before moving on.

- Stops and names one notice without hunting for your word.
- Says how they know, at least when you wait.
- Names one other thing it could be.
- Uses a cheap check when one is safe: look closer, sign, door, window, come back later.
- Treats a friend's sentence as information and still leaves it for the door.
- Turns one package for claim versus list, without a food sermon.
- Chooses a library book with a why, then talks about a page.
- At a museum, can do one object: see, label, gap.
- At a repeated park, can say what changed and how they know.

What can still be thin: unaided far transfer to a new city with no cue; a nature-journal habit you did not build; every room of a museum. Those can wait. Near transfer to another puddle, another sign, another door is the honest hope.

A parent who felt rusty should be able to say: I know how a walk we were taking anyway can carry one question. I know how to leave a friend's sentence for a door. We can do this.

A student should be able to say: I know what to notice. I am allowed not to know the name yet. I can change my mind when we look.

Chapter 7

Approaching disagreement

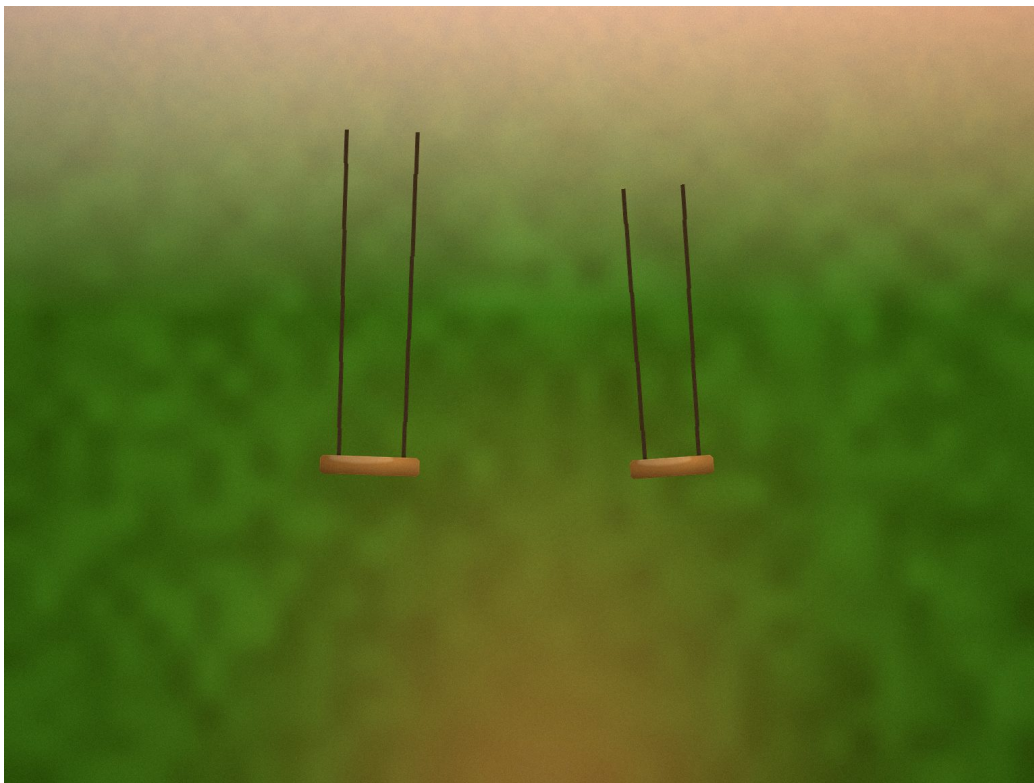


Figure 15: Two cups on a table, a generic box with a blank “best” badge, a park sign, a shop-hours plaque. No children, no logos.

Why this matters

Say yours, then say hers.

That sentence unlocks disagreement at five to ten. Not a debate club. Not a current-events hour. Not a lesson on who is allowed to be upset. A sequence, practiced on whose turn it is, which story to read, whether the ice melted because of the sun, whether a character saw what we saw, whether the shop is closed. You listen. You ask what they mean. You ask for a reason. You check if a check is cheap and safe. You wait. You may change your mind. If the reason is wrong, you hear it and ask a better question, then name a better reason or a fact. A fluent sentence is not a check.

Older students who stay on a finished-looking page often miss who is behind it.⁹⁹ That is why the habit starts small, on a cereal box, a jacket, a park sign, a friend's sentence: who wrote "best"; what would show it; the other box, the door, page 2. This chapter does not assign the high-school items. Near transfer to another box, another sign, another sentence is the honest hope. Far transfer to a later civic page is an open question. Knowledge of that later domain will still be required.¹⁰⁰

Talk can change the talk in the room without transferring to a new essay about an unseen story.¹⁰¹ A large school trial of a weekly philosophy hour found 0 months

⁹⁹Joel Breakstone, Mark Smith, Sarah Wineburg, Amie Rapaport, Jill Carle, Marshall Garland, and Anna Saavedra, "Students' Civic Online Reasoning: A National Portrait," *Educational Researcher* 50, no. 8 (2021): 505–515. n = 3,446 high-school students; 96 percent never learned a climate site's fossil-fuel ties. Why the habit of leaving a finished-looking sentence starts small. This chapter does not assign those items, the voter-fraud item, or a live .org as a 5–10 exercise. Translation: cereal box, jacket, park sign, friend's sentence. Sam Wineburg and Sarah McGrew, "Lateral Reading and the Nature of Expertise," *Teachers College Record* (2019): professional fact checkers leave an unfamiliar page. Civic Online Reasoning (cor.stanford.edu) asks: who's behind the information, what's the evidence, what do other sources say. There is no SHEG/COR RCT for K–2 in the sources opened for this book. Access date: 1 September 2026.

¹⁰⁰Daniel T. Willingham, "Critical Thinking: Why Is It So Hard to Teach?," *American Educator*, Summer 2007; NSW occasional paper, 2019. Maxims without the later domain's knowledge will not implement. Practice on a swing is practice on a swing. Cue near similarity. Far transfer is not the promise.

¹⁰¹Alina Reznitskaya, Monica Glina, Brian Carolan, Anna Michaud, Jon Rogers, and Lavina Sequeira, "Examining Transfer Effects from Dialogic Discussions to New Tasks and Contexts," *Contemporary Educational Psychology* 37, no. 4 (2012): 288–306. Twelve fifth-grade classrooms; Philosophy for Children versus regular instruction. Discourse became more dialogic. Post-intervention interview, persuasive essay, and recall of argumentative text: no statistically significant transfer. Grade 5 is the top of this book's age band. Changing the talk in the room is easier

extra progress on reading and maths, and no significant move on pupil-survey items about explaining ideas and working with different opinions.¹⁰² Dialogue may still be worth ten minutes as dialogue. It is not a proven engine of generic thinking or of elementary attainment at scale. Teacher glow is not the outcome.

That is worth the struggle because the house already disagrees. Two children, one swing. A snack that says “best.” A character who hid a cookie. Grey sky versus the window. “My friend said closed.” A park sign versus a memory. Each of those can be a fight, or a sequence. The parent who can hear “because it’s fair” as a starting point, not a check, can teach this week. The child who can let the other person finish, ask what they mean by *turn*, and look at one other thing — the bag, the clock, the sign — has practiced deciding what to do, with reasons, on a domain they actually know.

This week you can learn the sequence on a swing, and that a fluent “because it’s fair” is still a starting point, not a check. Today the student can let the other person finish, ask what they mean by *turn*, and look at one other thing.

For the parent: understand it yourself

You do not need to be a debate coach. You do need to hear “because I want the swing” as a wish, “because it’s fair” as a fluent start, and “Maya said closed” as a sentence that still has a door.

Everyday picture. Two children, one swing. Each has a sentence. If you pick a winner in the first second, you have a referee hour. If you say “say yours, then say hers,” wait, ask what *turn* means, ask how they know, and look at the bag on the seat or the clock or the sign, you have a thinking hour. The swing is still a swing.

than changing performance on a new task.

¹⁰²Education Endowment Foundation / NFER (Lord, Dirie, Kettlewell, and Styles), Philosophy for Children effectiveness trial, 2021. 198 schools, 5/5 padlock. FSM KS2 reading: ES 0.02, **0 months**. Whole-cohort reading: ES 0.01, **0 months**. No evidence of impact on maths. Pupil-survey items “I am good at explaining my ideas” and “I can work with someone who has different opinions”: no significant improvement. Teacher survey: 96 percent felt pupils had improved respect for others’ opinions; 93 percent felt pupils had improved ability to express views clearly. Teacher glow is not the outcome. 35 of 75 intervention schools were not at expected implementation after two years. Copy **0 months** whenever a Philosophy for Children hour is named. Gorard, Siddiqui, and See (2015), EEF efficacy trial, 48 schools: reading about +2 months, maths about +2 months — the efficacy trial that did not replicate at effectiveness scale.

Three to ten minutes when it actually happens. If the stakes are too hot, postpone. Practice on a cooler claim.

Precise picture. A *claim* is a sentence that can be true or not, or fair or not, about something we can look at. You do not have to win. You have to **listen**, then **ask**, then **check**. Meaning first. Argument second. A feeling can be named. It is not yet a check. Leave this sentence and look at one other thing. Changing your mind when the check goes the other way is the work. It is not losing. “I’m not sure yet” is allowed. Fake certainty is a fluent sentence pretending to be a check.

Four lines on a fridge are a classroom cousin scaled down: we listen; we ask what you mean; we give a reason; we can change our minds.¹⁰³ Posting is not practice. Practice is the next disagreement.

Reasons can be better or worse. Sensitivity to context — homework is not a turn-taking object; a birthday cake may be one each, not turns — is not the same as “anything goes.”¹⁰⁴ Hearing a wrong reason, then asking a better question, then naming a better reason if needed, is teaching. Silence in the face of a false reason is not kindness.

If a real family disagreement is too hot for the table today, pick the swing, the box, or the shop. Practice the moves. A later, heavier claim will need knowledge this sitting does not have. That is a fact about knowledge, not a dodge.

Wrong answers you should be able to hear

1. Listening means giving up the swing. “If I let her talk, she gets it.”

What it usually means. They think the sequence is a trick to make them lose.

What to say. “Say yours, then say hers. Then we look at the bag, or the clock, or the sign. Changing your mind if the check goes the other way is not losing. We still decide what to do.”

¹⁰³Neil Mercer, Rupert Wegerif, and Lyn Dawes, “Children’s Talk and the Development of Reasoning in the Classroom,” *British Educational Research Journal* 25, no. 1 (1999). Exploratory talk and ground rules, ages 9–10, classroom. A family can post four lines. Posting is not the trial.

¹⁰⁴Matthew Lipman, “Critical Thinking—What Can It Be?,” *Educational Leadership* 46, no. 1 (1988). Criteria, self-correction, context. Turns illustrations already in the essay (horse, blackboard, birthday cupcakes versus Pin the Tail). Context-sensitivity is an aim, not “anything goes.”

2. A fluent fairness sentence with no check. “Because it’s fair.” “Because the box says best.” “Because my friend said.” “Because it sounds right.”

What it usually means. A starting point offered as the look. The mash of a why that makes sense with evidence that it is so.¹⁰⁵

What to say. “What do you mean, *fair*? How do you know? How could we check?” Then look. If needed: “Fair in this game has meant turns. Your bag is on the seat. That is the look we have.”

3. You supplied the meaning and argued with that. They said “first.” You heard “always first,” and now you are in a fight with a sentence they did not say.

What it usually means. Meaning was skipped. Argument ate the sitting.

What to say. “What do you mean, *first*?” Wait. Then the reason. Then the check.

4. Repeat the rumor to knock it down. “Best, best, best — see, it’s not best.” Or a singsong of “Maya said closed” after you already looked at the door.

What it usually means. The sticky sentence got practiced. The check did not.¹⁰⁶

What to say. Repeat the check: the side of the box, the other box, the door, the sign, the window. Lead with what you looked at.

5. A performance of a fight, or a performance of being “the nice one.” Volume as proof. Or instant surrender with no look, to please you.

What it usually means. The sitting became theatre. The object left the table.

What to say. Stop. Point at the swing, the box, or the sign. Smaller claim. “What can we look at?” If it is still theatre, postpone.

Five-minute parent warm-up

Before the next real disagreement, or with a cooler claim on purpose:

¹⁰⁵Deanna Kuhn, “How Do People Know?,” *Psychological Science* 12, no. 1 (2001); Kuhn and Pearsall (2000). Young children mash a reason that makes sense with evidence that the claim is true. A fluent “because it’s fair” is still the mash.

¹⁰⁶Stephan Lewandowsky, John Cook, Ullrich K. H. Ecker, et al., *The Debunking Handbook* 2020. Backfire rare; continued influence real; illusory truth from repetition. Translation: repeat the check (door, side of the box, sign, window), not the rumor, with a snack-claim or a shop-claim. A translation, not a 5–10 RCT of the handbook.

1. Write the seven moves on a scrap: listen; what do you mean; how do you know; how could we check; wait; you may change your mind; a fluent sentence is not a check. You will not use all seven as a script in the first second. You will have them.
2. Write tonight's opening: "Say yours, then say hers." Wait a slow three out loud. It will feel long.¹⁰⁷
3. Write one fluent fake you expect — "because it's fair," "the box says best," "Maya said" — and the check you will point at: bag, clock, sign, side of the box, door, window.

If those three are fluent, you can hear a wish, a mash, and a rumor being practiced. That is the job. The child still talks. The object still sits there.

How to teach it this week

Use the thinking-hour shape. Fill it with a swing, a box, a story, a sky, a door. Stop while it is still a sitting.

Warm-up (2–4 minutes). Yesterday's one-change or yesterday's door, from memory. "What did we look at? What did we used to think?" Then: "Today we will say ours, then hers, and look at one other thing."

Short model (5–8 minutes). Two cups, or two turns at a timer, or a story character who did not see the snack move. You say a claim. You wait for theirs. You ask what they mean by the small word — *turn*, *best*, *closed*, *kind*. You ask how they know. You look at one other thing. You say the new sentence if the look goes the other way. Then you show the *wrong* cousin on purpose: you jump in at one second, or you argue with a meaning they did not say, or you repeat "best" as the thing to knock down. "What went wrong in that version?" Wait. Then stop talking sooner than feels polite.

Exact wording you can steal.

On the opening: "Say yours, then say hers."

On meaning: "What do you mean, *turn*?" "What do you mean, *best*?" "What do you mean, *closed*?" "What do you mean, *first*?"

¹⁰⁷Robert J. Stahl, "Using Think-Time and Wait-Time Skillfully in the Classroom," ERIC Digest ED370885 (1994). About three seconds as a convention. Classroom origin.

On reason: “How do you know?”

On else: “What else could be true?”

On check: “How could we check? Let’s look at the bag / the clock / the sign / the side of the box / the door / the window / page 2.”

On wait: “Take your time. I’ll wait.” Then look at the object if the silence is hard.

On mind-change: “You may change your mind. That is not losing.” “I’m not sure yet” is allowed.

On a wrong reason: “I hear that. I’m not sure that reason works, because... What else could be true?” Then a look, or a named fact if needed.

On the fluent fake: “That sentence is a start. What can we look at?”

On the rumor: “We looked at the door.” Not a singsong of Maya’s sentence.

Student attempt. After the model, the next small disagreement is theirs — two cups, a timer, a page. Product: they let the other sentence finish; they ask what a word means; they point at one other thing. You wait. You do not grab the swing.

One good question. After the attempt: “If we had not looked at the bag, what would we have been going by?”

Mixed practice. Same week: a box that says “best,” a character who might be mistaken, a grey sky, if those claims actually happen. Mix, so the sequence is not glued to the swing.

Exit ticket (2–5 minutes). “Say yours. Say hers. What did we look at?” Spoken is enough at five to seven. At eight to ten, one line: my view, her view, the check. Tool closed.

How to fade help. You run all seven moves out loud → they say theirs and hers while you ask meaning → they ask meaning → they point at the check. When they can leave a fluent “because it’s fair” for a bag or a clock without your prompt, put the seven-move scrap away. Bring it back when a new kind of disagreement arrives.

When to stop talking. After one model and one question. You hold the key: listen, meaning, reason, check, wait, mind-change. You do not become a referee essay. If the sitting is a fight, stop. Postpone. Pick a smaller claim.

Age-band moves

5–7. First-order is enough: I thought it was raining; we looked; it is not. I thought it was my turn; her bag is on the seat. Let the other person finish. Ask what *turn* means. Look at something near. Speech is talk. A feeling can be named. It is not yet the check. You may still need to name a better reason. Hearing is not endorsing.

8–10. Same sequence, slightly heavier grain. They can say hers in their own words. They can be asked, of a known story, what this character thinks the other character thinks — under a prompt, not as a default.¹⁰⁸ They can read a jacket, a sign, a box: who is named; what page 2 shows; what the sign says. Wait can include one line. They still mash “because it’s fair” with a look. They still need the object. A second-order question on a live quarrel is often too hot. Keep it on a story, then come back to the swing.

Placement is by skill, not birthday. A ten-year-old who cannot let the other sentence finish is still in the 5–7 band of this chapter. A six-year-old who says “you thought it was closed; we looked at the door; it is open” has done the thing. A “grade 2 critical thinking workbook” is a publisher’s scope, not a legal grade.

Practice that actually builds learning

Named try-its. Time, materials, safety, the fun, the skill. In the home and outside it. Kitchen, park, shop, sofa *are* the practice.

Try-it 1 — Two kids, one swing (or one toy)

Time. 3–10 minutes, when it actually happens.

Materials. The disputed object: a swing, a bike, a marker, a seat with a bag on it.

Safety. No humiliation. If stakes are too hot, postpone. You do not lecture a stranger’s child at a public park. This sitting is for the children you came with.

¹⁰⁸Josef Perner and Heinz Wimmer, “John thinks that Mary thinks that...,” *Journal of Experimental Child Psychology* 39 (1985). Second-order belief; unexpected early competence around 6 and 7 under optimal prompting; age range of the paper is 5 to 10 (abstract opened). An 8–10-year-old can be asked, of a story, what this character thinks the other character thinks. Still not a transferable gym. Passing a lab task is not the same as being fair in a real quarrel.

The fun. Being heard.

The skill. Listen; meaning of *turn*; reason; check (bag on the seat, clock, sign); wait; mind-change.

How to run it. “Say yours, then say hers.” Wait. “What do you mean, *your turn*?” “How do you know?” “How could we check?” Look. Decide what to do. Last thoughts allowed: “I used to think it was mine because I wanted it. Her bag is there.”

5–7. Finish, meaning, look. Short sentences.

8–10. They say hers in their own words before they argue. Still look.

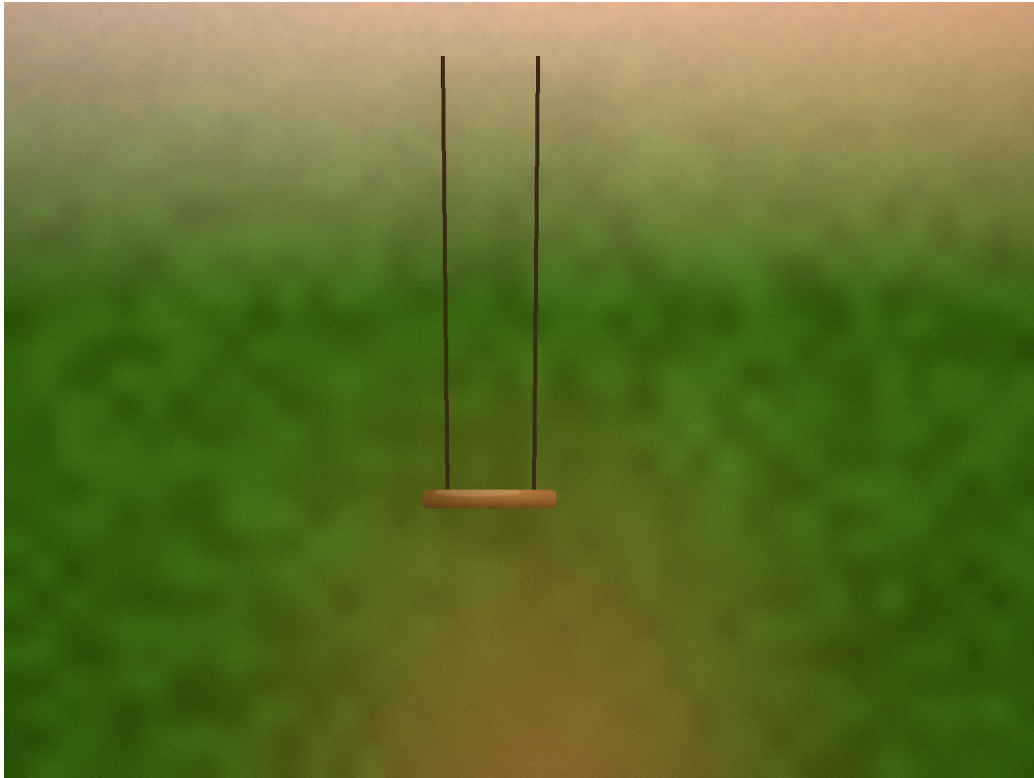


Figure 16: Two empty swing ropes, or an empty swing, at rest. No children, no logos.

Try-it 2 — Snack “best,” kitchen or store

Time. 3–8 minutes.

Materials. One box already bought, or one package in a shop you were in.

Safety. No shaming food. No body talk. Aisle courtesy. The sitting is a word on cardboard.

The fun. Catching that “best” is a word someone wrote.

The skill. Meaning of *best*; who’s behind the word (the company that wants you to pick it); the other box; fluent “the box says best” is not a check. Repeat the check, not the rumor.¹⁰⁹

How to run it. “What do you mean, *best*?” Turn the box. Side list. Other box if there is one. Who wanted you to pick this? Leave the front for the side. If “best” comes back later, repeat the side or the other box, not a singsong of *best*.

5–7. One word. One turn.

8–10. Front, side, other box, who wrote it. Still not a food-policy hour.

Try-it 3 — Story character who might be mistaken

Time. 10 minutes with a book you were reading.

Materials. A known picture book. Opened book as an object. Perspective or mistake types you already have — a cat seen two ways, a mark that might be a mistake — not a live-fight prompt. If a page is a live fight, turn to a different book.

Safety. Ordinary reading. No humiliation of a child who sided with the character.

The fun. Catching what the character did not see.

The skill. Reason versus picture. 5–7: what does she think, and what is so? 8–10: what does she think *he* thinks, under a prompt. Still not a transferable gym.¹¹⁰

¹⁰⁹Stephan Lewandowsky, John Cook, Ullrich K. H. Ecker, et al., *The Debunking Handbook 2020*. Backfire rare; continued influence real; illusory truth from repetition. Translation: repeat the check (door, side of the box, sign, window), not the rumor, with a snack-claim or a shop-claim. A translation, not a 5–10 RCT of the handbook.

¹¹⁰Josef Perner and Heinz Wimmer, “John thinks that Mary thinks that...,” *Journal of Experimental Child Psychology* 39 (1985). Second-order belief; unexpected early competence around

How to run it. “What does she think happened? What did we see on the page? How do we know?” Point. You may change your mind about whether she is kind, or greedy, or scared, when the next page shows why she hid the snack.

5–7. First-order: she thinks the snack is still there; we saw it move.

8–10. Under prompt: what does she think he thinks? Still point at the page.

Try-it 4 — Grey sky versus the window

Time. 2–5 minutes, then maybe ten minutes later.

Materials. The actual sky. A window.

Safety. Ordinary looking. Lightning — stay in. Weather as weather.

The fun. Being right, or changing your mind.

The skill. Prediction versus look. Wait. Mind-change.

How to run it. “You said rain. Say yours. The sky says grey. How could we check?” Look out the window. Look again in ten minutes. “I thought it was raining but it’s not.” Allowed. If they later say “but it looked like rain,” repeat the window, not a singsong of the prediction.

5–7. Look now.

8–10. Predict, look, wait, look again. One line.

Try-it 5 — “My friend said the shop is closed,” out-of-home

Time. The errand.

Materials. The door, the hours, a grown-up who was just there if you need a third look.

Safety. Ordinary street sense. You do not confront the friend. You do not make a public character lesson of an honest mistake.

The fun. Checking the door.

6 and 7 under optimal prompting; age range of the paper is 5 to 10 (abstract opened). An 8–10-year-old can be asked, of a story, what this character thinks the other character thinks. Still not a transferable gym. Passing a lab task is not the same as being fair in a real quarrel.

The skill. Take Maya seriously.¹¹¹ Still leave the sentence for the door. If the child later says “but Maya said,” repeat the door, not Maya’s sentence in a singsong.¹¹²

How to run it. “Say yours — you heard closed. Maya said closed. How could we check?” Walk. Hours. Handle. Later, the door is the sentence you repeat.

5–7. Walk to the door.

8–10. Door, hours, maybe a third speaker who was just there. Still the door first.

Try-it 6 — Park sign versus memory

Time. 5 minutes.

Materials. A sign you can walk to. Generic wording: hours, “dogs on leash,” a closed slide — ordinary park language. Not a live-fight poster.

Safety. Ordinary park sense. You do not run the sitting on other families.

The fun. Catching that memory filled in.

The skill. What the sign says, not what a friend remembers. Lateral reading scaled to a plaque: leave the memory for the object.¹¹³

How to run it. “You said the slide is closed. How do you know? What did the sign actually say?” Walk to it. Point. You may change your mind.

¹¹¹Harris and Koenig (2006); Clément, Koenig, and Harris (2004): take a previously careful speaker seriously; still look if looking is cheap. Four-year-olds ignored a reliable informant whose claim conflicted with what they themselves had seen.

¹¹²Stephan Lewandowsky, John Cook, Ullrich K. H. Ecker, et al., *The Debunking Handbook* 2020. Backfire rare; continued influence real; illusory truth from repetition. Translation: repeat the check (door, side of the box, sign, window), not the rumor, with a snack-claim or a shop-claim. A translation, not a 5–10 RCT of the handbook.

¹¹³Joel Breakstone, Mark Smith, Sarah Wineburg, Amie Rapaport, Jill Carle, Marshall Garland, and Anna Saavedra, “Students’ Civic Online Reasoning: A National Portrait,” *Educational Researcher* 50, no. 8 (2021): 505–515. n = 3,446 high-school students; 96 percent never learned a climate site’s fossil-fuel ties. Why the habit of leaving a finished-looking sentence starts small. This chapter does not assign those items, the voter-fraud item, or a live .org as a 5–10 exercise. Translation: cereal box, jacket, park sign, friend’s sentence. Sam Wineburg and Sarah McGrew, “Lateral Reading and the Nature of Expertise,” *Teachers College Record* (2019): professional fact checkers leave an unfamiliar page. Civic Online Reasoning (cor.stanford.edu) asks: who’s behind the information, what’s the evidence, what do other sources say. There is no SHEG/COR RCT for K–2 in the sources opened for this book. Access date: 1 September 2026.

5–7. Walk and point.

8–10. Memory, friend’s sentence, sign. The sign wins if they conflict. Still not suspicion as a personality.

Blocked practice is the first swing, the first “best,” the first window. Mixed practice is the same week’s story and door, so the sequence is not glued to turns. One incorrect example to diagnose: a fluent “because it’s fair” with no look, or a singsong of Maya’s sentence after the door was open. Hear it. Ask a better question. Then look.

Talk box

Opening. “Say yours, then say hers.”

Not: “Who is right?” Not: “What is the vocabulary word for disagreement?” Not: “Did you use your walking feet?”

Follow-ups.

1. What do you mean, *first?* (or *turn, best, closed, kind*)
2. How do you know?
3. What else could be true?
4. How could we check?
5. You may change your mind; that is not losing.

How to wait. After you ask, a slow three.¹¹⁴ After they stop, wait again. If they are mid-reason, let them finish. Look at the swing, the box, the window, or the sign, not at the child, if the silence is hard. You are not replicating a science-class wait-time study at the park.¹¹⁵

Stuck silence usually means: they think listening means giving up the swing; they are performing a fight; you supplied the meaning and argued with that; wait-time 1 was zero; they offered a wish where a look was asked for; the question was recitation in disguise; they are searching for a word. Pose, wait, point at the object. Rescue is picking the winner in the first second. A fight is a reason to stop, postpone, and pick a smaller claim.

¹¹⁴Robert J. Stahl, “Using Think-Time and Wait-Time Skillfully in the Classroom,” ERIC Digest ED370885 (1994). About three seconds as a convention. Classroom origin.

¹¹⁵Mary Budd Rowe, wait-time in elementary science class (NARST 1972 / JRST 1974). Picture of adult hurry. Not a homeschool RCT of disagreement.

For the student

Disagreement is two sentences about the same thing. You do not have to win. You have to listen, ask, and look.

Say yours, then say hers. Let the other sentence finish. Then say it in your own words if you can.

What do you mean? Small words hide a lot. *Turn. Best. Closed. First. Kind.*

How do you know? A feeling can be named. It is not yet a check.

How could we check? Leave this sentence and look at one other thing: the bag, the clock, the sign, the side of the box, the door, the window, page 2.

You may change your mind when the look goes the other way. That is not losing. “I’m not sure yet” is allowed.

A fast sentence is still a sentence. It is not better because it was first. A fluent “because it’s fair” is a start. It is not the look.

Tiny worked example.

Two people, one swing (illustration, not a reported family).

Yours: *It’s my turn. I got here first.*

Hers: *My bag is on the seat. I went to get water.*

What do you mean, *first*: *I touched the swing before she came back.*

How could we check: *Look at the bag. Look at the sign about turns. Look at a clock if we had a timer.*

The look: *Her bag is on the seat.*

New sentence: *I thought it was my turn because I wanted it and I was standing here. Her bag was already there. We can take timed turns now.*

That last sentence is deciding what to do, with a reason, after a look. It is not a prize for being nice.

Two tries.

1. Someone says a snack is “best” because the box says so. What do you mean, *best*? How could you check? What other thing could you look at?

2. A story character hides a snack. Someone says she is mean. What does she think is happening? What do we see on the page? You may change your mind on the next page.

Explain it back. Tell someone what “say yours, then say hers” is asking you to do. Then point at a swing, a box, or a window, and say what you would look at.

Challenge. A friend said the shop is closed. Say yours. Say theirs. How could you check? If you later want to say “but they said closed,” what sentence will you repeat instead?

You are allowed to wait. You are allowed to be unsure. You may change your mind when you look. A tool does not finish your sentence, and it does not look at the door for you.

If it isn’t clicking

Three diagnostics. Each one has a next move. No shame. Placement is by skill, not birthday.

1. They cannot let the other sentence finish, or they think listening is losing.

The opening has not landed. Next move: cooler stakes. Two cups. A timer. A story, not a live swing. Practice “say yours, then hers” as a game with nothing to win. Wait. Slow down until finish-and-meaning is easy. Go ahead to live turns once the game version is easy. A tutor is optional; two cups are cheap. Bring someone in if every disagreement is a fight and several weeks of cooler practice have not made finish possible.

2. Every reason is fluent and unchecked.

“Because it’s fair.” “The box says best.” “Maya said.” “It sounds right.” Next move: leave this sentence and look at one other thing, every time, for a week. Bag, side, door, window, page 2. Repeat the check, not the rumor. Stay on objects. Go ahead to “say hers in your own words” once a check is a habit. A tutor is not the first move; the object is.

3. You argue with a meaning they did not say, or you pick a winner at one second, or the sitting is theatre.

The adult move is the bottleneck. Next move: your five-minute warm-up, again.

Opening, wait, meaning first. If it is theatre, stop. Postpone. Smaller claim. If a real quarrel is too hot, pick the box or the sky. Correct a wrong reason without crushing the talk: hear it, better question, look or named fact. “Never correct” is not this book’s rule. Silence leaves them with the error.

When to slow down. No finish. No look. Fight. Those are brakes. Age is not a brake. A later, heavier claim is not the on-ramp.

When to go ahead. They can say ours and hers, ask what a word means, look at one other thing, and change the sentence without treating it as losing. Then the habit chapter has somewhere to sit.

When to get a human tutor. You cannot yet hear a fluent fake, even after the warm-up. Or the hour is a fight for weeks. A tutor who will wait and point at objects, not a debate coach, is a reasonable valve. Keep yourself as the person who can still say “what do you mean?” and “how could we check?”

Tools, including AI

Optional helpers for you. The full rules live in the thinking-hour box in the front of this book. This chapter points back.

The child talks to you. The child looks at the swing, the box, the door, the page. After they have tried, you may ask a tool to explain this page to you, to offer extra questions you will vet — throw out any that import a live controversy, a secret, or a pretend expert — to write a SCRIPT for you to say, to give a hint after an attempt, or to diagnose a reason they already gave.

A tool does not write the child’s reason. A tool does not invent who was at the park, whether the shop is closed, or what a sign said. A tool does not become a “fair-swing professor.” The child does not sit alone with an open chat. Detectors are not a grade. There is no certificate of disagreement. A fluent paragraph from a machine is performance, not their check.

Ages 5–10: scripts and parent-child talk, not live open chat. Accounts stay on your side. A thinking tool is not a secret friend.

What “done enough” looks like

Done enough is the sequence on a swing, a box, a story, a sky, a door, a sign. It is not a diploma in disagreement. It is not a current-events hour. The title a stranger can read, if a title is needed, is still **Reading** (a story, a jacket, a label) or **Science** (ice, weather) or ordinary family life. It is not Critical Thinking I. It is not P4C I.

Checklist before moving on.

- Lets the other sentence finish, at least on a cool claim.
- Asks what a small word means: *turn, best, closed, first*.
- Asks how they know, and can hear a wish or a feeling as not-yet-a-check.
- Leaves this sentence for one other thing: bag, clock, sign, side of the box, door, window, page 2.
- Waits, or accepts your wait, without treating silence as a trick.
- Changes the sentence when the look goes the other way, or can say “I’m not sure yet.”
- Repeats the check, not the rumor, when the old sentence comes back.
- Treats a fluent “because it’s fair” as a start, not the look.

What can still be thin: unaided transfer to a later civic page; second-order talk in a live quarrel; a persuasive essay about an unseen story.¹¹⁶ Those can wait. Near transfer to another swing, another box, another friend’s sentence is the honest hope.

A parent who felt rusty should be able to say: I know the sequence on a swing. I know what a fluent fake sounds like. I know what to say tomorrow. We can do this.

A student should be able to say: I know how to let the other sentence finish. I am allowed to wait. I can change my mind when we look.

¹¹⁶Alina Reznitskaya, Monica Glina, Brian Carolan, Anna Michaud, Jon Rogers, and Lavina Sequeira, “Examining Transfer Effects from Dialogic Discussions to New Tasks and Contexts,” *Contemporary Educational Psychology* 37, no. 4 (2012): 288–306. Twelve fifth-grade classrooms; Philosophy for Children versus regular instruction. Discourse became more dialogic. Post-intervention interview, persuasive essay, and recall of argumentative text: no statistically significant transfer. Grade 5 is the top of this book’s age band. Changing the talk in the room is easier than changing performance on a new task.

Chapter 8

A life of the habit



Figure 17: An open notebook with dated questions, four handwritten lines on a fridge list, a calendar with a Tuesday circled. No diploma, no badge, no faces.

Why this matters

What did we used to think, and what do we think now?

That question unlocks the habit. Not a slogan. Not a trait you pin on a child. Not a diploma. Not a certificate of thinking. A life of looking, on ordinary challenges, often enough that the question is familiar. Ice last Tuesday. The same puddle this Tuesday. A swing, then a box, then a door. The same five moves, named, waited, revisited.

Tips in this chapter are moves you can say. They are not posters. “Be a critical thinker” is a label. “What did we used to think, and what do we think now?” is a move. “We listen; we ask what you mean; we give a reason; we can change our minds” are moves, once they leave the fridge and enter the next disagreement. “Same question next Tuesday” is a move. An 8–10 one-line frame — I think ____ because ; **we could check by** — is a move, if the child fills the blanks. A library hour as the week’s free sit is a move. A printed certificate is not a move. It is a prop.

At five to seven, the job is to make the child’s already-present moves audible and named, in domains they know: snacks, stories, weather, turns, a window. At eight to ten, the same moves, heavier grain: hold two minds at once, apply a criterion across contexts (turns on a swing, not on homework), notice when a good story is being offered in place of a look.¹¹⁷ Same faculty. Different grain. Not two diplomas. There is no gene for this. There is no window that closes at ten.¹¹⁸ A nine-year-old who does not yet change her mind on a messy, two-thing problem is in the middle of a long coordination. Adults still replace a look with a good story. Trained scientists fail outside their knowledge.¹¹⁹ Start now. Keep going. Do not

¹¹⁷Age map as tendencies, not gates. National Research Council, *Taking Science to School* (2007), Chapter 3: what children can do at a particular age is a complex interplay among maturation, experience, and instruction; development is not an inevitable unfolding; there is no simple concrete-to-abstract progression. This chapter does not assign Piagetian stage ages to 5–7 versus 8–10. Access date: 1 September 2026.

¹¹⁸Daniel T. Willingham, “Critical Thinking: Why Is It So Hard to Teach?,” *American Educator*, Summer 2007: even 3-year-olds can think critically in a known domain; even trained scientists can fail outside one. There is no critical-thinking gene in the sources opened for this book, and no window that closes at 10. Deanna Kuhn: adult jurors still satisfice on a narrative; theory–evidence coordination is a long project.

¹¹⁹Willingham (2007); “How to Teach Critical Thinking,” NSW Department of Education occasional paper, 2019. Not a bicycle. Maxims without knowledge will not implement. Four-step plan: identify what is meant by critical thinking in each domain; identify the content those skills need;

hold a ceremony.

That is worth the struggle because the year will try to become a kit, a workbook grade, or a pin. A publisher's "grade 2 critical thinking workbook" is a scope, not a legal grade, and not a transcript line. A weekly school philosophy hour, at scale, found 0 months extra progress on reading and maths.¹²⁰ Ten minutes of a named question, a few times a week, is the honest home ambition. Often enough that the question is familiar. Not a dosage study. Not Going for Gold.

This week you can learn how 5–7's audible moves become 8–10's two-minds and criterion-across-contexts, without a diploma ceremony. Today the student can say one "I used to think... now I think..." after a look, without being asked to perform.

For the parent: understand it yourself

You do not need to be a philosopher. You do need to hear a slogan where a move should be, and a diploma-sentence where a look should be.

Everyday picture. Last Tuesday the puddle was ice. This Tuesday it is water. If you ask "are you a critical thinker now?" you will get a performance. If you ask "what did we used to think, and what do we think now?" you will get the habit, or you will hear that the habit is not there yet. Both are useful. The puddle is still a puddle.

Precise picture. Ennis's public sentence is still the one you can keep: reasonable reflective thinking focused on deciding what to believe or do.¹²¹ Take a position and change it when the evidence and reasons are sufficient. Withhold when they

sequence; revisit. Near transfer is the honest hope. Far transfer unaided is untested at the parent grain.

¹²⁰Education Endowment Foundation / NFER, Philosophy for Children effectiveness trial, 2021: 198 schools, 5/5 padlock, **0 months** extra progress on FSM reading and on whole-cohort reading; no evidence of impact on maths. Copy 0 months whenever a Philosophy for Children hour is named. Gorard, Siddiqui, and See (2015): about +2 months in reading and maths in a smaller efficacy trial that did not replicate at effectiveness scale. School P4C was about weekly. Dose at the parent grain remains unknown. The honest pitch is often enough that the question is familiar.

¹²¹Robert H. Ennis, "What is critical thinking?," criticalthinking.net, last revised 11/26/10; *The Nature of Critical Thinking* PDF, last revised September 2015. "Critical thinking is reasonable reflective thinking focused on deciding what to believe or do." Disposition 9: take a position and change a position when the evidence and reasons are sufficient; withhold when they are insufficient. The concept is not negative.

are not. The concept is not negative. “Critical” in this house still does not mean “find the fault in people.” Lipman’s three features — criteria, self-correction, context — are manners of talk over years, not a Gold pin.¹²² Willingham’s architecture is still not a bicycle: sequence the specific moves, give them something to think about, revisit.¹²³ Near is the honest hope. Far, unaided, six months later, on a new domain, is untested. Cue “this is like last Tuesday’s puddle.”

Screens are optional. The rule for under-thirteen accounts has a compliance date that has already passed. Default the family hour to no child login.¹²⁴ A paper book, a walk, a kitchen, a library card. A thinking tool is still not a secret friend. Point back to the thinking-hour box.

Siblings of mixed ages, common at the homeschool table, are a fit fact: a picture book a five-year-old can see and a nine-year-old can argue about is a better family object than two graded workbooks. Combine honestly. Library book plus kitchen check plus one written question from a module you opened is still **Reading** and **Science**. It is not a Franken-title.

Wrong answers you should be able to hear

1. A trait performance. “I’m a critical thinker.” Or, from the adult: “Tell Grandma how we think in this house.”

What it usually means. The label ate the look. Mind-change became a show.

What to say. “What did we used to think, and what do we think now? What did we look at?”

2. Mind-change as losing. “If I say the new thing, she wins.”

¹²²Matthew Lipman, “Critical Thinking—What Can It Be?,” *Educational Leadership* 46, no. 1 (1988). Criteria, self-correction, context. Turns illustrations already in the essay. Aims, not a trial, and not a Gold pin.

¹²³Willingham (2007); “How to Teach Critical Thinking,” NSW Department of Education occasional paper, 2019. Not a bicycle. Maxims without knowledge will not implement. Four-step plan: identify what is meant by critical thinking in each domain; identify the content those skills need; sequence; revisit. Near transfer is the honest hope. Far transfer unaided is untested at the parent grain.

¹²⁴Children’s Online Privacy Protection Rule, 16 C.F.R. Part 312; 90 FR 16918 (22 April 2025). Bright line: children under 13. Amended Rule effective 23 June 2025; general compliance date 22 April 2026, which has passed. Default the family hour to no child login. UNESCO (2023) independently recommended age 13 for independent classroom use of generative AI tools.

What it usually means. The swing chapter is still in the room. The habit has not yet separated changing a sentence from losing a seat.

What to say. “Changing your mind when we look is the work. It is not losing. ‘I’m not sure yet’ is allowed.”

3. The fridge as the practice. Four lines posted. The next disagreement ran as a fight anyway.

What it usually means. Posting was the sitting. Practice is the next disagreement.

What to say. Point at the lines once. Then do the swing, the box, or the door. The paper does not wait for you.

4. A certificate, a pin, a workbook stamp as the year. “We finished the thinking book. We’re done.”

What it usually means. Completion replaced revisit. A sitting that claims to measure thinking at this age is not the kitchen hour.¹²⁵

What to say. “Same question next Tuesday. What changed?” No certificate. No badge. The puddle is the exam.

5. Two faculties, or a closed window. “She’s seven, so she can’t hold two minds.” “He’s ten, so we missed it.”

What it usually means. A stage calendar, or a panic, replaced skill. Age bands in this book are tendencies, not gates.¹²⁶

What to say. Place by the move you hear. A five-year-old may ask a sharp how-do-you-know about a puddle and still not sit a long test. A ten-year-old may read chapter books and still practice the same picture-book types. Stay on the object.

¹²⁵Insight Assessment: California Critical Thinking Skills Test designed for undergraduate and graduate students. Pearson TalentLens Watson–Glaser: employment and graduate screening. The Critical Thinking Co., Cornell Critical Thinking Test Level X: grades 5–12+, 71 items — the publisher’s range begins at the top of this book’s age band; still a sitting, still not the kitchen hour, still not a requirement. This book does not send a parent of a 5–10-year-old there.

¹²⁶Daniel T. Willingham, “Critical Thinking: Why Is It So Hard to Teach?,” *American Educator*, Summer 2007: even 3-year-olds can think critically in a known domain; even trained scientists can fail outside one. There is no critical-thinking gene in the sources opened for this book, and no window that closes at 10. Deanna Kuhn: adult jurors still satisfice on a narrative; theory–evidence coordination is a long project.

Five-minute parent warm-up

Before this week's sitting:

1. Write last Tuesday's question and today's. If they are not cousins, pick a cousin: same puddle, same jar, same book, same sign.
2. Write one "I used to think... now I think..." you would accept as enough, spoken, without a performance. Then wait a slow three after you ask it out loud.¹²⁷
3. Look at the fridge lines, if you posted them. Write the next real disagreement you expect — swing, snack, sky — and which line you will point at *once* before you look.

If those three are fluent, you can hear a slogan, a diploma-sentence, and a posting-without-practice. That is the job. The child still talks. Tuesday still comes.

How to teach it this week

Use the thinking-hour shape. Fill it with a revisit, a last-thoughts sentence, a fridge line that enters a real disagreement, a one-line frame at eight to ten, a library sit. Stop while it is still a sitting.

Warm-up (2–4 minutes). Last Tuesday's puddle, jar, or page, from memory. "What did we think then? What did we look at?" No new kit.

Short model (5–8 minutes). You say your own old view, without theatre: "I used to think the shop was closed. We looked at the door. Now I think it was open." Then the child's cousin: same object, their sentence. Then the *wrong* cousin on purpose: "We are critical thinkers in this house" with no object. "What is missing?" Wait. Stop talking sooner than feels polite.

Exact wording you can steal.

On the opening: "What did we used to think, and what do we think now?"

On the look: "What did we look at?"

On revisit: "Is this like last Tuesday's puddle?"

¹²⁷Robert J. Stahl, ERIC Digest ED370885 (1994). Think-time; about three seconds as a convention. Classroom origin.

On the next change: “What would make us change again?”

On the fridge: “We listen. What do you mean? What’s the reason? You may change your mind. Now let’s look.”

On the one-line: “I think ____ because . **We could check by .**” You do not fill the blanks.

On the library: “Why this book? Then we sit.”

On a slogan: “That is a label. What did we look at?”

On a certificate: there isn’t one. “Same question next Tuesday.”

Student attempt. After the model, they say the old view and the new view about an object still in the room. Product: one spoken pair, or at eight to ten one written line with blanks they fill. You wait. You do not finish the blanks. A model that fills the blanks is a crutch in miniature.¹²⁸

One good question. After the attempt: “What would make us change again?”

Mixed practice. Same week: fridge line into a real disagreement; same puddle next time you pass it; library sit if you were going anyway. Mix, so the habit is not glued to a last-thoughts ritual at the table.

Exit ticket (1–3 minutes). “What did we used to think? What do we think now? What did we look at?” Spoken is enough. At eight to ten, the dated line. Tool closed.

How to fade help. You say your old-and-new → they say theirs with your prompt → they say theirs at the end of any try without being asked to perform → they notice a cousin (“this is like the ice”) without your cue. When they can revisit without a ceremony, put the script away. Bring it back when a new domain arrives.

When to stop talking. After one model and one question. You hold the key: old view, look, new view, same question next Tuesday. You do not become a graduation speech.

¹²⁸Hamsa Bastani et al., *Proceedings of the National Academy of Sciences*, 2025. High-school mathematics field RCT: an unguarded chatbot made practice look better and left students worse on a closed-book exam. One crutch sentence: a model that finishes the blanks can make the sitting look done. Math, not a little-thinkers coefficient.

Age-band moves

5–7. Make existing moves audible. Name wait, meaning, how-do-you-know, what-else, check, in known, low-stakes domains. Last thoughts are spoken, optional, not a performance. Check is near. Speech is talk. First-order mind-change: I thought rain; the window said no. A picture book a five-year-old can see is enough, even if a sibling is nine.

8–10. Hold two minds at once, under a prompt, on a known story. Apply a criterion across contexts: turns on a swing; not on homework; one each at a birthday; sequential turns at a game.¹²⁹ Notice when a good story is offered in place of a look. Wait can include writing one line: I think ____ because ; ***we could check by*** . They fill the blanks. They can read a jacket, a sign, a box. They still mash. They still need the object. They still do not sit a college inventory. Cornell Level X's publisher range begins at grade 5–12+; it is still a sitting, still not the notebook, still not a requirement. This book does not send you there.¹³⁰

Placement is by skill, not birthday. A five-year-old who asks a sharp how-do-you-know about a puddle is not “ahead into a diploma.” A ten-year-old who still reports a wish as a look is still in the 5–7 band of the five moves. Stay.

Growing is not a promotion. It is the same question on a slightly heavier object. The five-year-old who could only point at the ribbon now says, some of the time, “that’s how we know she won; the sneakers are why she might have.” The eight-year-old who could only take turns on a swing now says, some of the time, “homework is not a turn-taking object.” The nine-year-old who could only look out the window now notices that a good story about why the shop “must be closed” is being offered in place of the door. None of those sentences is a diploma. All of them are the habit, one grain heavier. If the heavier sentence is not there yet, the lighter one still counts. Revisit. Cue the cousin. Wait. Look.

¹²⁹Matthew Lipman, “Critical Thinking—What Can It Be?,” *Educational Leadership* 46, no. 1 (1988). Criteria, self-correction, context. Turns illustrations already in the essay. Aims, not a trial, and not a Gold pin.

¹³⁰Insight Assessment: California Critical Thinking Skills Test designed for undergraduate and graduate students. Pearson TalentLens Watson–Glaser: employment and graduate screening. The Critical Thinking Co., Cornell Critical Thinking Test Level X: grades 5–12+, 71 items — the publisher’s range begins at the top of this book’s age band; still a sitting, still not the kitchen hour, still not a requirement. This book does not send a parent of a 5–10-year-old there.

Practice that actually builds learning

Named try-its. Time, materials, safety, the fun, the skill. In the home and outside it.

Try-it 1 — I used to think..., kitchen

Time. 1–2 minutes at the end of any try.

Materials. None, or the object still on the table.

Safety. Optional, not a performance. No confession ritual. No audience required.

The fun. Saying the old view without shame.

The skill. Ennis’s change-when-warranted, made audible.¹³¹

How to run it. After a look: “What did we used to think, and what do we think now?” Wait. If they perform a trait, point at the ice. If they cannot yet say the old view, you may model yours once, then stop.

5–7. Spoken. Short.

8–10. Spoken, then optional one line. They fill it.

Try-it 2 — Fridge ground rules, then the next real disagreement

Time. Posting is 2 minutes. Practice is the next fight.

Materials. Four lines: we listen; we ask what you mean; we give a reason; we can change our minds.¹³²

Safety. Posting is not practice. The paper does not replace the look. If the next disagreement is too hot, postpone and use a cooler claim.

The fun. Pointing at a line you wrote together, then doing it.

¹³¹Robert H. Ennis, “What is critical thinking?,” criticalthinking.net, last revised 11/26/10; *The Nature of Critical Thinking* PDF, last revised September 2015. “Critical thinking is reasonable reflective thinking focused on deciding what to believe or do.” Disposition 9: take a position and change a position when the evidence and reasons are sufficient; withhold when they are insufficient. The concept is not negative.

¹³²Mercer, Wegerif, and Dawes (1999). Exploratory-talk ground rules, ages 9–10 classroom. Four fridge lines are a cousin, not a replication of that trial.

The skill. Mercer’s cousin, scaled down. Ground rules as moves, not as wallpaper.

How to run it. Write the four lines. The next time a swing, a snack, or a story blows up, point at one line *once*. Then “say yours, then say hers.” Then look. If you only point, you posted. If you look, you practiced.

5–7. One line at a time. Listen. Then look.

8–10. They can point at the line. Still look.

Try-it 3 — Same question next Tuesday, walk or kitchen

Time. 5 minutes.

Materials. The same puddle, the same jar, the same book, the same sign.

Safety. Ordinary walk or kitchen sense.

The fun. “What changed?”

The skill. Revisit. Willingham’s sequence-and-revisit, in a week you can actually live.¹³³

How to run it. Write Tuesday’s question in the notebook, stimulus named. Next Tuesday, same place or same object. “What did we used to think? What do we think now? What did we look at? Is this like last time?” Cue if needed: “this is like the ice.”

5–7. Same jar. Same window.

8–10. Same object, plus “what would make us change again?”

Try-it 4 — 8–10 one line

Time. 5 minutes.

Materials. Paper. Three blanks: I think ____ because . *We could check by* .

Safety. A model that fills the blanks is a crutch. They write. You wait.

¹³³Willingham (2007); “How to Teach Critical Thinking,” NSW Department of Education occasional paper, 2019. Not a bicycle. Maxims without knowledge will not implement. Four-step plan: identify what is meant by critical thinking in each domain; identify the content those skills need; sequence; revisit. Near transfer is the honest hope. Far transfer unaided is untested at the parent grain.

The fun. Filling their own blanks.

The skill. A sentence with a reason and a check, unaided. Not an essay. Not a diploma line.

How to run it. After a look, the paper. You do not dictate. If they stall, a hint: “what did we look at?” not the finished sentence. Five-to-seven-year-olds may skip this try-it and stay in speech. A six-year-old who wants to write a caption may write a caption.

5–7. Skip, or a caption of two words.

8–10. The line. Tool closed.

Try-it 5 — Library hour as the week’s free sit

Time. 10–20 minutes.

Materials. A library card. One book.

Safety. Ordinary library rules. You still pick the prompt. If the display is a live fight, a different bay.

The fun. Returning to a place, not finishing a kit.

The skill. The life of the habit as a place you return to. In 2016, 66 percent of homeschool households used the library as a source of curriculum and books.¹³⁴ The free hour is the stay.

How to run it. Why this book? Sit. One question. Last thoughts. Date the notebook line under Reading. Then go home. The life is the return next week, not a pin at the desk.

5–7. Cover, one page, one question.

8–10. Jacket, a heavier question they can still point at, one line.

Blocked practice is the first “I used to think” after ice. Mixed practice is fridge-into-fight, Tuesday revisit, library sit, so the habit is not glued to a closing ritual.

¹³⁴NCES 2020-001, Table 6: library 66 percent as a source of curriculum and books in 2016. The free sit is a path, not a Philosophy for Children RCT. Whenever Philosophy for Children is named, copy EEF 2021 **0 months** (note 106).

One incorrect example to diagnose: a trait sentence with no object, or blanks you filled. Hear it. Ask what they looked at. Then look.

Talk box

Opening. “What did we used to think, and what do we think now?”

Not: “Are you a critical thinker?” Not: “What did you learn about thinking today?”

Not: “Did you have fun?”

Follow-ups.

1. What did we look at?
2. What would make us change again?
3. Is this like last Tuesday’s puddle?
4. How do you know the new view?
5. You may change your mind again later. “I’m not sure yet” is allowed.

How to wait. After you ask, a slow three.¹³⁵ After they stop, wait again. Look at the notebook, the puddle, the fridge line, or the book, not at the child, if the silence is hard. Classroom think-time is a convention. It is not a homeschool trial of habits.

Stuck silence usually means: they think mind-change is losing; they are performing a trait; you want a diploma sentence; wait-time 1 was zero; they cannot remember last Tuesday because it was never named; the question was recitation in disguise. Pose, wait, point at last Tuesday’s object. Rescue is “we are a thinking family” with no look. A fight is a reason to stop and try a smaller last-thoughts on ice.

For the student

A habit is a question you meet again.

What did we used to think, and what do we think now? is the question. It needs a look in the middle.

¹³⁵Robert J. Stahl, ERIC Digest ED370885 (1994). Think-time; about three seconds as a convention. Classroom origin.

You are allowed to change your mind. That is not losing. “I’m not sure yet” is allowed.

You are not a badge. You are a person who looks, waits, and says the new sentence when the look goes the other way.

Next Tuesday you can ask the same question about the same puddle, the same jar, the same book. That is how a move gets familiar. It is not a test you pass once.

Tiny worked example.

Last Tuesday (illustration, not a reported family): *I thought the shiny patch was ice.*

We looked: *a stick splashed. It was water.*

Now: *I think it was water. We could check again after a cold night.*

Next Tuesday: same patch. Maybe ice this time. You look again.

Two tries.

1. After any look today, say: I used to think . **Now I think** . What did you look at?
2. Write, or say, one line: I think ____ because . **We could check by** . Fill your own blanks.

Explain it back. Tell someone why “I’m a critical thinker” is a label, and why “what did we look at?” is a move.

Challenge. Same question next Tuesday. Pick the object now. Write the question in a notebook with the date and the name of the book, the jar, the puddle, or the sign. When Tuesday comes, do not wait to be asked to perform. Look. Say the old view and the new one.

You are allowed to wait. You are allowed to be unsure. A tool does not fill your blanks. A certificate does not look in the jar.

If it isn’t clicking

Three diagnostics. Each one has a next move. No shame. Placement is by skill, not birthday.

1. They perform a trait, or they treat mind-change as losing.

The label ate the look. Next move: smaller last-thoughts on ice or a window, no audience. “What did we look at?” until the object is back. Slow down the fridge speech. Go ahead to Tuesday revisits once old-and-new is a sentence about a thing. A tutor is optional. Bring someone in if last-thoughts have become a fight or a show for weeks.

2. The fridge, the workbook, or a pin replaced the next disagreement.

Posting without practice. Completion without revisit. Next move: one real claim this week — swing, snack, sky — and one line pointed at *once*, then a look. Throw the certificate idea out. Same question next Tuesday is the exam. Stay there until revisit is easy. Go ahead to the one-line frame once spoken old-and-new is easy. A tutor is the wrong object if the load is a kit; shrink the kit.

3. Age became a gate, or a panic about a window.

“Too young.” “Too late.” Next move: place by the move you hear. 5–7 audible and near. 8–10 two minds under a prompt, criterion across contexts, story-versus-look. Same moves. No gene. No window.¹³⁶ A nine-year-old who still mashes a good story with a look is in a long coordination. So are adults.¹³⁷ Stay on the object. A tutor who will wait and point, not a test coach, if weeks of revisits still produce only labels.

When to slow down. No object. No revisit. Fight. Performance. Those are brakes. Birthday is not a brake.

When to go ahead. Old view, look, new view, without a show. Same question next week without a ceremony. Then records in the next chapter have something true to date.

When to get a human tutor. You cannot yet hear a slogan where a look should

¹³⁶Daniel T. Willingham, “Critical Thinking: Why Is It So Hard to Teach?,” *American Educator*, Summer 2007: even 3-year-olds can think critically in a known domain; even trained scientists can fail outside one. There is no critical-thinking gene in the sources opened for this book, and no window that closes at 10. Deanna Kuhn: adult jurors still satisfice on a narrative; theory–evidence coordination is a long project.

¹³⁷Willingham (2007); “How to Teach Critical Thinking,” NSW Department of Education occasional paper, 2019. Not a bicycle. Maxims without knowledge will not implement. Four-step plan: identify what is meant by critical thinking in each domain; identify the content those skills need; sequence; revisit. Near transfer is the honest hope. Far transfer unaided is untested at the parent grain.

be. Or the habit hour is a fight. A tutor is a valve, not a diploma. Keep yourself as the person who can still ask what you used to think, and what you think now.

Tools, including AI

Optional helpers for you. The full rules live in the thinking-hour box in the front of this book. This chapter points back.

The child talks to you. The child looks. After they have tried, you may ask a tool to explain this page to you, to offer extra questions you will vet, to write a SCRIPT for you to say, to give a hint after an attempt, or to diagnose a reason they already gave.

A tool does not fill the child's blanks. A tool does not print a certificate of thinking. A tool does not grade a detector score. A tool does not invent last Tuesday's puddle. The child does not sit alone with an open chat. A fluent "I used to think" paragraph from a machine is performance, not their check.

Ages 5–10: scripts and parent-child talk, not live open chat. The under-thirteen compliance date has passed. Default no child login.¹³⁸ Accounts stay on your side. A thinking tool is not a secret friend.

What “done enough” looks like

Done enough is a life of the question, not a ceremony. There is no national thinking diploma at this age. There is no Critical Thinking I. There is no Gold pin this book will treat as a grade. Placement is by skill. Combine objects honestly. The title is still Reading or Science.

Checklist before moving on.

- Says, at least sometimes without being asked to perform, what they used to think and what they think now, after a look.
- Treats mind-change as allowed, not as losing, on a cool claim.
- Meets the same question next Tuesday on a named object.

¹³⁸Children's Online Privacy Protection Rule, 16 C.F.R. Part 312; 90 FR 16918 (22 April 2025). Bright line: children under 13. Amended Rule effective 23 June 2025; general compliance date 22 April 2026, which has passed. Default the family hour to no child login. UNESCO (2023) independently recommended age 13 for independent classroom use of generative AI tools.

- Uses fridge lines, if posted, as a pointer into a real disagreement, not as wallpaper.
- At 8–10, fills a one-line frame without you filling the blanks.
- Returns to a library sit as a free hour, not as a kit to finish.
- Does not ask for a certificate, and is not offered one.
- Still needs knowledge, still mashes sometimes, still lives in a long coordination — and that is enough.

What can still be thin: unaided far transfer six months later; a multivariable problem at nine; a sitting on a published thinking test. Those can wait. They are not a window that closed. They are not a reason to start Cornell Level X as the family hour.

A parent who felt rusty should be able to say: I know how 5–7's audible moves become 8–10's two-minds, without a diploma. I know what to say next Tuesday. We can do this.

A student should be able to say: I know the question. I am allowed to wait. I can change my mind when we look. I am not a badge.

Chapter 9

Records

The thinking *work* can be as serious as any kitchen's. The *credit* is a family claim until a stranger can use it — a receiving third-grade teacher, a Pennsylvania evaluator, a New York quarterly reader, a later high-school transcript the family will someday write. That stranger will not have sat at your table. They will have a page.

This chapter is how you make that page at ages 5–10. Lawful, honest, and readable to a stranger are three jobs. Keep them in view.

This week you can date one question in a notebook so a stranger could almost read it. Today the student tries the question. You write the line.

Illustration. An open notebook, a dated line, an opened picture book beside it. No diploma seal. No “A+.” No child.

What you are making

You are making a **notebook of questions**, dated, with the stimulus named. You are not making a national diploma. You are not making Critical Thinking I.

There is no federal homeschool diploma and no national critical-thinking credit.¹³⁹ Texas, North Carolina, and New York do not issue one. Pennsylvania has its own

¹³⁹Texas Education Agency, “Home Schooling” and “Alternative Schooling” (accessed 1 September 2026). No state homeschool diploma. *Leeper* list: reading, spelling, grammar, mathematics, good citizenship — critical thinking is not named. North Carolina DNPE: the State issues neither diploma nor transcript. NYSED / 8 NYCRR 100.10: no local or Regents diploma for home instruction. Pennsylvania 24 P.S. § 13-1327.1: a supervisor or approved-organization diploma after listed

supervisor or approved-organization diploma after listed graduation courses — a high-school object, not a five-year-old’s file. A parent-issued diploma can be a real piece of paper later. It is not a registrar’s national thinking credit now.

Two readers, even at 5–10, if anyone outside the kitchen asks. The **state**, in a thick jurisdiction: an IHIP, an affidavit, a portfolio, a test in reading and math. A **later stranger**: a public school on transfer; a private school; a future high-school transcript. State compliance is not a thinking diploma. A thick Pennsylvania portfolio can be in statutory compliance with no philosophy score. A silent Texas year can be lawful with no file at all. Neither fact is a reason to skip the moves. Both facts are a reason not to fake a credit.

A family that invents “Critical Thinking I, 1.0, A” for a seven-year-old has created a slogan. A receiving teacher cannot map it. Athletic eligibility and college exams are the wrong object for this book. They belong to an older year. A parent of a nine-year-old who is already anxious about core-course worksheets has been handed the wrong timeline.

The national survey of homeschool subjects never offered a critical-thinking checkbox. Thinking moves, if they happened, happened inside reading, science, or conversation.¹⁴⁰ Informal learning does not arrive as “Reading, 1.0, B+.” If a thick state later wants a log, the translation is: name the book, name the question, date it.

Titles a stranger can read

Print these and only these as elementary names, if a name is needed at all:

Reading / Language Arts. Mathematics. Science. Social Studies / History (if taught). **Art, Music, Physical Education.**

graduation courses is Pennsylvania’s credential, not a U.S. Department of Education diploma, and is a high-school object.

¹⁴⁰National Center for Education Statistics, *Parent and Family Involvement in Education: 2016* (NCES 2020-001), Tables 8 and 9, and the 2016 PFI-H questionnaire. No row labelled critical thinking, philosophy, logic, or informal reasoning. Do not reuse neighboring subject percents (history, scientific inquiry, world languages, computer science) as a thinking percent. Informal curriculum 12 percent (Table 6) does not arrive as a graded credit. NCES 2024-113 (*Parent and Family Involvement in Education: 2023*): 3.4 percent homeschooled in 2022–23, about 1,765,000; instruction-at-home 5.2 percent is a different bucket. Access date for sources in these notes: 1 September 2026.

Those names travel. They are the names public elementary reports already use. They are the names homeschool elementary files, when they exist, already follow.

Never a brand. Never Critical Thinking I. Never P4C I. Never Paul–Elder. Never Thoughtful Gold. Never Philosophy for Children 101. Never Lab Thinking 1. Never Outdoor Philosophy 1. Never Little Thinker, Level 1.

The notebook of questions lives *inside* Reading or Science. Honesty on the title is the same rule as honesty on a reason. If the year’s work was picture books and kitchen checks, the title is Reading and Science. A beautiful binder labelled “Little Thinker, Level 1” has satisfied one reader (the parent) and confused the next.

The brand, if used at all, sits in a parenthetical or in a description: “Reading (picture-book discussion; questions in a notebook).” “Science (ice; one-change; looked).” Combining objects is allowed. Combining does not mint a new title. Library book plus kitchen check plus one module question is still Reading and Science.

A publisher’s “grade 2 critical thinking workbook” is a scope, not a legal grade, and not a transcript line. Placement is by skill, not birthday. Instruction for a six-year-old need not be “first grade.”¹⁴¹

Here is an illustration, labelled as such, not a reported family:

3 September 2026. *They All Saw a Cat*. Q: Did the mouse and the dog see the same cat? Child: No, because the pictures are different. Check: we looked at the mouse page and the dog page.

That is a record a parent, a Pennsylvania evaluator, or a New York quarterly narrative can actually use. It is not a credit. It is not a sitting on a college inventory. It is not a diploma.

The law is a pattern, not one form

U.S. homeschooling is state law. There is no federal thinking office. Dates and subject lists change. Read your current department page and the statute it cites. A color-coded chart on a membership site is not your statute. Five official-page

¹⁴¹ NYSED home-instruction guidance: instruction should match the student’s needs and previous achievement; a six-year-old’s instruction need not be labelled first grade.

examples show the range. **None of them requires a critical-thinking course.**¹⁴²

Texas. The Agency does not regulate home-school programs. Parents follow a bona fide written curriculum: reading, spelling, grammar, mathematics, and good citizenship. Critical thinking is not named. Philosophy is not named. The state does not award a homeschool diploma. At 5–10 there may be no external reader at all. The kitchen still benefits from a dated list of books and questions if the family later transfers. The Agency will not file it. Transfer is treated like an unaccredited private school. “We did philosophy” is not, by itself, a public-school credit.

North Carolina. Notice of Intent. Nine calendar months. Each year, a nationally standardized test in English grammar, reading, spelling, and mathematics — not critical thinking. The home school, not the State, issues any later diploma. A five-hour day is a recommendation, not the statute, and not a thinking-minutes table. Persons other than the parent may instruct. A thinking notebook is extra. It is not the annual test.

Pennsylvania. Elementary shall include English (spelling, reading, writing), arithmetic, science, geography, history of the United States and Pennsylvania, civics, safety education, health and physiology, physical education, music, and art. No critical thinking. No philosophy. No logic. Portfolio tests in grades 3, 5, and 8 are in reading/language arts and mathematics, not critical thinking. Drop the questions into the log of reading materials and samples. Do not invent a parallel “CT portfolio.” Graduation science years are a later object. A supervisor diploma is Pennsylvania’s, and it is high school.

Virginia. Notice by 15 August, a parent-written list of subjects, and evidence of progress by 1 August: a composite score at or above the fourth stanine, or an equivalent SAT, ACT, or PSAT score, or an evaluation or college transcript the superintendent accepts. Critical thinking is not named as required. Those sittings

¹⁴²Opened homeschool pages, 1 September 2026. **Texas:** TEA Home Schooling / Alternative Schooling; *Leeper* subjects as above. **North Carolina:** DNPE Requirements — annual nationally standardized test in English grammar, reading, spelling, and mathematics; five-hour day a recommendation; G.S. 115C-563(a) allows non-parent instructors. **Pennsylvania:** 24 P.S. § 13-1327.1 elementary list as above; portfolio tests in grades 3, 5, and 8 in reading/language arts and mathematics, not critical thinking; 180 days or 900 elementary hours are whole-program hours. **Virginia:** VDOE Home Instruction — parent-written list of subjects; evidence of progress by composite stanine, SAT/ACT/PSAT equivalent, or evaluation/college transcript; critical thinking not named. **New York:** 8 NYCRR 100.10 grades 1–6 required subjects as above; grades 7–8 include library skills on a regular basis; a unit is 6,480 minutes; critical thinking is not a required unit in 9–12. None of these five requires a critical-thinking course.

are not thinking exams. Do not sit a college inventory to “satisfy Virginia.” Adding “Critical Thinking” as a fifth line on the subject list does not make the year more lawful. It may confuse a later stranger. Put the questions inside Reading.

New York. Letter of intent, an Individualized Home Instruction Plan, quarterly reports, and an annual assessment. Grades 1–6 required subjects include arithmetic, reading, spelling, writing, English language, geography, U.S. history, science, health, music, visual arts, physical education. Critical thinking is not named. Put enquiry under Reading or Science in the quarterlies: material covered in each IHIP subject. A unit is 6,480 minutes; critical thinking is not a required unit even in 9–12. Home instruction does not yield a local or Regents diploma. Placement is by need, not birthday. Grades 7–8 mention library skills on a regular basis — a reminder that libraries exist, not a thinking course at 5–10.

If you live in none of those states, you still have a department page. Open it.

If they transfer

Transfer is a local placement problem. A brand in the title column will not be read as Reading. Another reason the title should already look like Reading, or Mathematics, or Science.

A receiving teacher who sees “Critical Thinking I, A” has been given a slogan. A teacher who sees “Reading — picture-book discussion; dated questions in a notebook; opened *They All Saw a Cat*” has been given a year they can place.

What does not belong in this file yet

Dual enrollment, Advanced Placement, credit-by-exam, athletic core-course worksheets, and a common college application are **not this chapter**. They belong to an older book and an older child. Scores help a stranger believe a *high-school* transcript. They do not replace a dated question at seven.

College and graduate inventories — the California Critical Thinking Skills Test, the Watson–Glaser — are designed for undergraduate, graduate, or employment screening.¹⁴³ They are not for 5–10. Cornell Level X’s publisher range begins at

¹⁴³Insight Assessment, CCTST product page: designed for undergraduate and graduate students. Pearson TalentLens, Watson–Glaser: employment and graduate screening. The Critical Thinking

grades 5–12+. That is still a sitting, still not the kitchen hour, still not a requirement. This book does not send a parent of a five-to-ten-year-old there. A K–12 product line that sells thinking tests is a product line. It is not a family requirement and not a stranger-readable elementary credit.

Place by skill, not birthday

Can the child look in a jar and change the sentence? If not, they are still in a look-versus-wish year. Can they name the one thing that changed? If not, they are still in a taught one-change stage. Can they let the other sentence finish and point at a bag, a door, or a sign? If not, they are still in the opening of disagreement. High-sounding *titles* cannot skip those moves. A ten-year-old may still be in the five-to-seven band of a chapter. A six-year-old may already catch two things changed at once. Skill first.

What to keep in the file

1. A notebook of questions: date, stimulus named, the question, what the child said, what you looked at. Under **Reading** or **Science** if a title is needed.
2. A list of books actually opened, if a thick state wants reading materials in a log. The brand of a module, if you used one, belongs in a description, not as the course name.
3. Samples a stranger could look at without you in the room: a caption, an 8–10 one-line frame the child filled, a dated ice line. Not a certificate. Not a college inventory score.
4. The compliance packet your own statute asked for — an IHIP, a quarterly, a portfolio, a reading-and-math test — in its own envelope. That envelope is not a thinking diploma.

If you live in a silent jurisdiction, the notebook is still worth keeping. Transfer happens. Memory fades. A dated line is kinder than a reconstructed year.

Co., Cornell Critical Thinking Test Level X: grades 5–12+, 71 items. EDUCATE INSIGHT is a K–12 product line, not a family requirement. What Works Clearinghouse, search re-opened 1 September 2026: no intervention report named Philosophy for Children, named “critical thinking” as a K–5 programme, or dialogic teaching as generic critical thinking.

A template, a signature, and the truth

A tool, including a helper on your side of the table, may draft a **template**: blank lines for date, stimulus, question, what the child said, what you looked at. That is a form. It is not a record until you fill it from the sitting.

You read every line. You check the book against the shelf and the date against the calendar. Then, if a thick state wants a signature on a quarterly or a portfolio, you sign. Hours that were not sat are a false statement. A polished paragraph the child did not say is not the child's reason. The tool may format. You attest.

Keep the notebook. One line is enough:

- the **date**;
- the **stimulus** named (book title, “ice on two plates,” “shop door,” “park sign”);
- the **question**;
- a short note of what the child said and what you looked at.

That folder is not a transcript. At 5–10 you often do not need a transcript. The notebook is how you would defend a Reading or Science line if a stranger asked.

For the student

Your notebook is a picture of questions you actually asked. You looked. You said how you knew. You changed the sentence when the look went the other way. When a parent writes a line, it should be a line about something you did. If a line on the page is not true, say so before anyone treats it as the year.

You do not get a diploma for thinking at five, or at ten. You get Tuesday.

What “done enough” looks like

You can hand a stranger a notebook page. The titles, if any, are from the list a teacher already knows. The questions are dated. The stimulus is named. There is no Critical Thinking I. There is no certificate of thinking. The folder matches the page. That is enough.

A parent who felt rusty should be able to say: I know how to date one question so a stranger could almost read it. The student still tries the question. We can do this.

Chapter 10

Resources

This chapter names programs families actually meet. It does not rank them. It does not sell them. It is a fit list so you can match an object to the table you already have: how much of the teaching you will carry, whether a kitchen can use it without a school, what it costs in money and in minutes, and whether the prompt stays on a swing, a snack, a story, a sky, a door.

A “grade 2 critical thinking workbook” is a publisher’s scope, not a legal grade. Placement is by skill. The record, as Chapter 9 said, still says Reading, or Mathematics, or Science. Combining two honest objects does not mint a new title.

Whenever Philosophy for Children is named below, copy this sentence with it: a large English effectiveness trial in 2021, 198 schools, highest security rating, found **0 months** extra progress on reading and maths, including for pupils eligible for free school meals.¹⁴⁴ Dialogue may still be worth the hour as dialogue. It is not a proven engine of generic critical thinking or of elementary attainment at scale. An earlier, smaller efficacy trial had found about **+2 months** in reading and

¹⁴⁴Education Endowment Foundation / NFER (Lord, Dirie, Kettlewell, and Styles), Philosophy for Children effectiveness trial, 2021. 198 schools (75 intervention, 123 control), 5/5 padlock. FSM KS2 reading: ES 0.02, **0 months**, $p = 0.68$. Whole-cohort reading: ES 0.01, **0 months**. No evidence of impact on maths for the whole cohort or FSM. Pupil-survey items on explaining ideas and working with different opinions: no significant improvement. Teacher survey: 96 percent felt pupils had improved respect for others’ opinions; 93 percent felt pupils had improved ability to express views clearly. 35 of 75 intervention schools were not implementing at the expected level after two years; six did not implement at all. EEF: no plans for a further P4C trial on attainment grounds; no harm to reading and maths. Average cost on the page: £13.50 per pupil per year averaged over three years for Going for Gold. Copy **0 months** whenever Philosophy for Children is named. Access date: 1 September 2026.

maths; that result did not replicate at effectiveness scale.¹⁴⁵ Teacher glow is not the outcome. Implementation failure is a load fact: if schools with trainers could not all keep the hour, a kitchen will not keep a forty-minute franchise more faithfully by buying a pin.

This week you can name *why* tonight's object fits this child — usually a library book plus one question. Today the student tries that question. They are not on a shopping task.

Illustration. A library card, a picture book, a small unbranded box of cards, a kitchen table. Not a Gold pin. Not a wheel. No logos. No portraits.

How to read a program

Four questions do the work.

Parent load. Are you asking one question on a book you already read? Sitting with a four-hundred-page manual? Booking a trained facilitator? Building a co-op hour?

Style. Picture-book talk on the sofa? A novel written for a circle of enquiry? A short published guide with cartoon characters? A walk you were taking anyway?

Cost shape. Nothing tonight. A book you already own. A charity training priced for schools. Fees this book did not verify. Confirm a current price on the page before you buy. This chapter does not invent one.

Kitchen without a school. Can one adult and one child use it at a table, or does it assume a class, a trainer, a Bronze-to-Gold ladder, or a pin?

Reach numbers on an organization's page are that organization's copy, not a home-school census and not an effect size.

¹⁴⁵Stephen Gorard, Nadia Siddiqui, and Beng Huat See, *EEF Philosophy for Children* evaluation, 2015 (ERIC ED581147). 48 English primary schools; SAPERE training; about one P4C period per week. KS2 n = 1,529. Hedges' g: reading +0.12 (~2 months), maths +0.10 (~2 months), writing +0.03 (~0 months), CAT4 +0.07. Primary outcome was attainment, not a critical-thinking test. Fidelity scores from trainers did not correlate with attainment. The efficacy trial that did not replicate at effectiveness scale. EEF later noted that if the 2015 trial had been analysed with 2021 methods, it is "unlikely to have demonstrated such a positive effect" — a methodological caution, not a smear.

What Works Clearinghouse, searched again on 1 September 2026, still has no intervention report named Philosophy for Children, named “critical thinking” as a K–5 programme, or dialogic teaching as generic critical thinking.¹⁴⁶ Neighboring reports that do exist — Dialogic Reading for preschool oral language; an ethics curriculum filed as character education; concept mapping in college advising — are neighboring. They are not a thinking franchise for ages 5–10. This book does not put a clearinghouse logo on a philosophy kit.

Kitchen table, nothing spent

The book already read, plus wait, plus one question. Not Going for Gold. Not a course name. Record: a dated notebook line under Reading or Science.

Fit. Tonight, one child, low load, low cost. A walk you were taking anyway is the same shape: notice, name, how do you know, cheap check. A kitchen one-change test and a package claim are the same shape. This is not “failing the specialist.” It is the object this book already taught.

Transcript. Reading. Science. Never Critical Thinking I. Never Outdoor Philosophy 1. Never Lab Thinking 1.

IAPC novels and manuals

The Institute for the Advancement of Philosophy for Children, at Montclair, describes the oldest organization devoted to young people’s philosophical practice, founded in 1974. Philosophy for Children, in the 2021 effectiveness trial, found **0 months** extra progress on reading and maths.¹⁴⁷ It publishes novels for students

¹⁴⁶What Works Clearinghouse products search, re-opened 1 September 2026. Keyword “Philosophy for Children” returned Heartwood Ethics / An Ethics Curriculum for Children (character education), not Lipman/IAPC/SAPER P4C. Keyword “critical thinking” returned Academic Concept Mapping as a college-advising study, not an elementary CT intervention report. Keyword “dialogic” returned Dialogic Reading (preschool oral language). No named P4C or named-CT K–5 intervention report as of that access date.

¹⁴⁷Education Endowment Foundation / NFER (Lord, Dirie, Kettlewell, and Styles), Philosophy for Children effectiveness trial, 2021. 198 schools (75 intervention, 123 control), 5/5 padlock. FSM KS2 reading: ES 0.02, **0 months**, $p = 0.68$. Whole-cohort reading: ES 0.01, **0 months**. No evidence of impact on maths for the whole cohort or FSM. Pupil-survey items on explaining ideas and working with different opinions: no significant improvement. Teacher survey: 96 percent felt

and long manuals for teachers. A typical session: read or act a story; students identify issues; a community of inquiry.¹⁴⁸ Parent load is high. The shape is school-shaped. Large trials used a UK training charity that **dropped the novels**. Owning a novel is not the 2015 +2 months, and it did not survive the 2021 **0 months** on reading and maths.¹⁴⁹ ¹⁵⁰ 2026 U.S. list price, and which novel maps cleanly to 5–10, are not claimed here. Open the current catalogue if you want the books. Playground-safe analogues only: fairness about turns, not a live fight. If a prompt is a live controversy, substitute a swing, a snack, a story character, a sky, a door.

Fit. A family that wants novels and a manual, and can carry a school-shaped hour at home or in a co-op. Not a statute. Not a clearinghouse report. Not a kitchen requirement.

Transcript. The novel title is not the course name. Reading, if the year's reading

pupils had improved respect for others' opinions; 93 percent felt pupils had improved ability to express views clearly. 35 of 75 intervention schools were not implementing at the expected level after two years; six did not implement at all. EEF: no plans for a further P4C trial on attainment grounds; no harm to reading and maths. Average cost on the page: £13.50 per pupil per year averaged over three years for Going for Gold. Copy **0 months** whenever Philosophy for Children is named. Access date: 1 September 2026.

¹⁴⁸Institute for the Advancement of Philosophy for Children, montclair.edu/iapc (opened 1 September 2026). Novels ~80 pages; manuals ~400 pages, as the institute describes. Community of inquiry as session shape. Playground-adjacent prompts and live-fight prompts both appear in the institute's own "why philosophy" lists; this book uses playground-safe analogues only.

¹⁴⁹Education Endowment Foundation / NFER (Lord, Dirie, Kettlewell, and Styles), *Philosophy for Children effectiveness trial*, 2021. 198 schools (75 intervention, 123 control), 5/5 padlock. FSM KS2 reading: ES 0.02, **0 months**, $p = 0.68$. Whole-cohort reading: ES 0.01, **0 months**. No evidence of impact on maths for the whole cohort or FSM. Pupil-survey items on explaining ideas and working with different opinions: no significant improvement. Teacher survey: 96 percent felt pupils had improved respect for others' opinions; 93 percent felt pupils had improved ability to express views clearly. 35 of 75 intervention schools were not implementing at the expected level after two years; six did not implement at all. EEF: no plans for a further P4C trial on attainment grounds; no harm to reading and maths. Average cost on the page: £13.50 per pupil per year averaged over three years for Going for Gold. Copy **0 months** whenever Philosophy for Children is named. Access date: 1 September 2026.

¹⁵⁰Stephen Gorard, Nadia Siddiqui, and Beng Huat See, *EEF Philosophy for Children evaluation*, 2015 (ERIC ED581147). 48 English primary schools; SAPERE training; about one P4C period per week. KS2 $n = 1,529$. Hedges' g : reading +0.12 (~2 months), maths +0.10 (~2 months), writing +0.03 (~0 months), CAT4 +0.07. Primary outcome was attainment, not a critical-thinking test. Fidelity scores from trainers did not correlate with attainment. The efficacy trial that did not replicate at effectiveness scale. EEF later noted that if the 2015 trial had been analysed with 2021 methods, it is "unlikely to have demonstrated such a positive effect" — a methodological caution, not a smear.

was the year's reading.

Thoughtful (formerly SAPERE)

In 2025, SAPERE became Thoughtful.¹⁵¹ That is a name change, not a new trial. The English trials used the SAPERE name and a Going for Gold package. UK school training. Average cost on the effectiveness-trial page: £13.50 per pupil per year averaged over three years. A U.S. kitchen cannot go for Gold. Charity copy about reach is charity copy. Steal the shape — a stimulus, a minute of wait, one actual question, last thoughts — if it helps. Copy both trials. Philosophy for Children in that 2021 effectiveness trial: **0 months** extra progress on reading and maths.¹⁵² The 2015 efficacy finding of about +2 months did not replicate at scale.¹⁵³

Fit. A family that wants school-shaped training and is in reach of UK provision, or that will steal the shape without the ladder. No U.S. statute requires it. Award level is not a grade.

Transcript. Never Thoughtful Gold. Never P4C I.

¹⁵¹Thoughtful, thoughtful.org.uk/about (opened 1 September 2026): established 1992 as SAPERE; in 2025, SAPERE became Thoughtful. The EEF trials used the SAPERE name.

¹⁵²Education Endowment Foundation / NFER (Lord, Dirie, Kettlewell, and Styles), Philosophy for Children effectiveness trial, 2021. 198 schools (75 intervention, 123 control), 5/5 padlock. FSM KS2 reading: ES 0.02, **0 months**, $p = 0.68$. Whole-cohort reading: ES 0.01, **0 months**. No evidence of impact on maths for the whole cohort or FSM. Pupil-survey items on explaining ideas and working with different opinions: no significant improvement. Teacher survey: 96 percent felt pupils had improved respect for others' opinions; 93 percent felt pupils had improved ability to express views clearly. 35 of 75 intervention schools were not implementing at the expected level after two years; six did not implement at all. EEF: no plans for a further P4C trial on attainment grounds; no harm to reading and maths. Average cost on the page: £13.50 per pupil per year averaged over three years for Going for Gold. Copy **0 months** whenever Philosophy for Children is named. Access date: 1 September 2026.

¹⁵³Stephen Gorard, Nadia Siddiqui, and Beng Huat See, EEF *Philosophy for Children* evaluation, 2015 (ERIC ED581147). 48 English primary schools; SAPERE training; about one P4C period per week. KS2 $n = 1,529$. Hedges' g : reading +0.12 (~2 months), maths +0.10 (~2 months), writing +0.03 (~0 months), CAT4 +0.07. Primary outcome was attainment, not a critical-thinking test. Fidelity scores from trainers did not correlate with attainment. The efficacy trial that did not replicate at effectiveness scale. EEF later noted that if the 2015 trial had been analysed with 2021 methods, it is "unlikely to have demonstrated such a positive effect" — a methodological caution, not a smear.

The Philosophy Foundation

A UK charity, founded 2007. It trains specialist philosophy teachers and classroom teachers. It **names home educators**: it will run sessions with home-educator groups of 5–15 children in the same key stage if a local philosopher is available or travel is paid, and it points families to resources and a parents' guide.¹⁵⁴ London-weighted. U.S. availability and fees are not claimed here. There is no independent randomized trial of this charity in the sources opened for this book. Do not borrow the SAPERE/Thoughtful trials as if they were this charity's trials. When the hour is a Philosophy for Children hour, copy **0 months** from 2021.¹⁵⁵

Fit. A home-educator group that wants a facilitated hour and can actually book one. Moderate to high load. Not a U.S. statute. Not a kitchen-table trial.

Transcript. Not "Philosophy Foundation 1." Reading, if that is the work.

PLATO

Philosophy Learning and Teaching Organization. A U.S. nonprofit. Mission language names students, educators, and **families**. A toolkit of lesson plans (the site describes more than 250). High-school Ethics Bowl is **older than this age band**. Do not send a seven-year-old to Ethics Bowl as the family hour.¹⁵⁶ Open a lesson. Substitute if the prompt is a live fight. Plans are a fit object. They are not a credit.

¹⁵⁴The Philosophy Foundation, philosophy-foundation.org, including the home-education page (opened 1 September 2026). Charity numbers 1140338 / company 7416912. Home-educator groups of 5–15, same key stage, if a local philosopher is available or travel is paid. Organization reach figures on the site are charity copy, not a homeschool census.

¹⁵⁵Education Endowment Foundation / NFER (Lord, Dirie, Kettlewell, and Styles), Philosophy for Children effectiveness trial, 2021. 198 schools (75 intervention, 123 control), 5/5 padlock. FSM KS2 reading: ES 0.02, **0 months**, $p = 0.68$. Whole-cohort reading: ES 0.01, **0 months**. No evidence of impact on maths for the whole cohort or FSM. Pupil-survey items on explaining ideas and working with different opinions: no significant improvement. Teacher survey: 96 percent felt pupils had improved respect for others' opinions; 93 percent felt pupils had improved ability to express views clearly. 35 of 75 intervention schools were not implementing at the expected level after two years; six did not implement at all. EEF: no plans for a further P4C trial on attainment grounds; no harm to reading and maths. Average cost on the page: £13.50 per pupil per year averaged over three years for Going for Gold. Copy **0 months** whenever Philosophy for Children is named. Access date: 1 September 2026.

¹⁵⁶PLATO, plato-philosophy.org (opened 1 September 2026). Families named in the mission. Toolkit described as over 250 lesson plans. Ethics Bowl is a high-school object.

Fit. A family or co-op that wants a written plan and will still pick the prompt. Moderate load if you host the hour.

Transcript. Never PLATO as the course name. Reading or a short seminar description inside Reading.

Wartenberg / Prindle picture-book modules

Thomas Wartenberg’s picture-book module library, stewarded by the Prindle Institute. *Big Ideas for Little Kids* is named as the book that showed how picture books could open inquiry. The site describes a large module library.¹⁵⁷ Closest opened U.S. object to “use the book on the sofa.” Do not dump two hundred titles. Open a module. Read the picture book. Skip any prompt that is a live fight. Playground-safe analogue if needed. Traffic numbers are institute copy, not a trial.

Fit. A family that wants picture-book questions already written down, after opening the module. Low to moderate load. The book on the sofa is still the object.

Transcript. Reading. The brand is not the title.

Picture-book talk is still oral language when you are doing Whitehurst-style shared reading. That is a good sofa practice. It is not, by itself, a critical-thinking curriculum, and a preschool oral-language rating is not a thinking rating.¹⁵⁸

Paul–Elder children’s mini-guide

Linda Elder, *The Miniature Guide to Critical Thinking for Children*, second edition, 2006: 24 pages, listed at \$20 on the store page opened for this book, cartoon characters, elements of reasoning, intellectual standards, intellectual virtues, described for K–6 classroom use.¹⁵⁹ This is a **brand** of teaching materials — a pub-

¹⁵⁷Prindle Institute, Teaching Children Philosophy (prindleinstitute.org/teaching-children-philosophy/tcp-about, opened 1 September 2026). Wartenberg modules; *Big Ideas for Little Kids* (2009) named. Module counts and visitor counts are institute copy.

¹⁵⁸What Works Clearinghouse, *Dialogic Reading* (revised 8 February 2007): positive effects on oral language, preschool, centre-based. Not a critical-thinking rating.

¹⁵⁹Foundation for Critical Thinking store: Linda Elder, *The Miniature Guide to Critical Thinking for Children*, 2nd ed., 2006, 24 pages, \$20 list on the page opened 1 September 2026. Brand language, cartoon characters, K–6 classroom use as described. Not Abrami. Not a meta-analysis of ages 5–10.

lished method with a small book and a set of terms — not a meta-analysis of what moves thinking at ages 5–10. Steal “what do you mean?” if it helps. Do not teach the wheel as the science of little-kid thinking. Do not franchise the characters as the family method.

Fit. A family that wants explicit vocabulary in a short booklet, and will still put an object on the table. Moderate load if the wheel becomes the hour. Optional. The wheel is not a credit.

Transcript. Never Paul–Elder. Never the wheel. Reading, if vocabulary lived inside reading.

Workbooks, cards, routines, tests

Puzzle-shaped workbooks and prompt cards exist. See–Think–Wonder is a usable prompt; “making thinking visible” is a project framework, not a law and not a clearinghouse-endorsed programme for ages 5–10.¹⁶⁰ Steal a prompt. Skip live-fight cards. The hour keeps its ordinary name.

Tests. The California Critical Thinking Skills Test is for undergraduate and graduate students. Watson–Glaser is employment and graduate screening. Cornell Level X: grades 5–12+, still a sitting, still not the kitchen hour, still not a requirement. A K–12 product line of thinking tests is a product line. State elementary tests in the five opened jurisdictions are reading and math. A bump in reading is not proof of a philosophy novel.¹⁶¹

Fit. A family that wants a puzzle shape or a prompt card, after opening it, and will still look at an object. Tests at this age: not these inventories.

¹⁶⁰Harvard Graduate School of Education, Project Zero, Visible Thinking page (fetched 1 September 2026): a research-based conceptual framework; thinking routines, documentation, reflective professional practice. Ritchhart, Church, and Morrison, *Making Thinking Visible* (2011), is a practitioner book. No WWC report. Routines are usable prompts, not evidence that the brand produces generic critical thinking.

¹⁶¹Insight Assessment CCTST product page; Pearson TalentLens Watson–Glaser; The Critical Thinking Co. Cornell Level X (grades 5–12+). EDUCATE INSIGHT is a K–12 product line. State elementary tests in Texas, North Carolina, Pennsylvania, Virginia, and New York, as opened for Chapter 9, are reading and mathematics (and neighboring required subjects), not a philosophy sitting.

Common Sense Media does not pick this book's morals

Common Sense Media describes itself as a children's advocacy group. It publishes age-based reviews of books, shows, games, and apps, and it advocates for laws and policies.¹⁶² Ratings exist. They are one advocacy rater's age labels and morals, not a research finding about critical thinking, and not this book's canon. Use them if they help you preview. They do not choose the sofa prompt. They do not choose the park sign.

A short chooser, not a ranking

Nothing spent, tonight, one child → library picture book plus one question (low load) — not Critical Thinking I.

Walk already happening → notice, name, how do you know, cheap check (low) — not Outdoor Philosophy 1.

Kitchen already happening → one-change test; package claim (low) — not Lab Thinking 1.

Wants picture-book questions written down → a Wartenberg/Prindle module, after opening it (low to moderate) — brand name not a title.

Wants a co-op hour → a PLATO lesson; a Philosophy Foundation-style group if one is actually available; parent-led enquiry (moderate to high) — not P4C Gold. If that hour is Philosophy for Children, copy **0 months**.¹⁶³

¹⁶²Common Sense Media, "What we stand for" / media-choice pages (opened 1 September 2026). Self-described children's advocacy group; independent age-based reviews; advocacy for laws and policies. Advocacy, not this book's morals and not a thinking effect size.

¹⁶³Education Endowment Foundation / NFER (Lord, Dirie, Kettlewell, and Styles), Philosophy for Children effectiveness trial, 2021. 198 schools (75 intervention, 123 control), 5/5 padlock. FSM KS2 reading: ES 0.02, **0 months**, $p = 0.68$. Whole-cohort reading: ES 0.01, **0 months**. No evidence of impact on maths for the whole cohort or FSM. Pupil-survey items on explaining ideas and working with different opinions: no significant improvement. Teacher survey: 96 percent felt pupils had improved respect for others' opinions; 93 percent felt pupils had improved ability to express views clearly. 35 of 75 intervention schools were not implementing at the expected level after two years; six did not implement at all. EEF: no plans for a further P4C trial on attainment grounds; no harm to reading and maths. Average cost on the page: £13.50 per pupil per year averaged over three years for Going for Gold. Copy **0 months** whenever Philosophy for Children

Wants novels and a manual → IAPC (high) — novel title not the course name. Philosophy for Children: **0 months** in 2021.¹⁶⁴

Wants school-shaped training → Thoughtful, formerly SAPERE, UK (high); no U.S. statute requires it — award level not a grade. Philosophy for Children: **0 months**.¹⁶⁵

Wants explicit vocabulary → the Paul–Elder children’s mini-guide as an optional brand (moderate) — the wheel not a credit.

Wants a test score → not this age for the college and employment inventories; Cornell X is still a sitting for older.

None of those bullets is “best.” Fit is whether you can hear a wish offered as a reason in that object’s work, and whether the child will do the talking and the looking. A kitchen that wants a question is not failing the specialist. A family that wants a novel is not required to pretend the 2021 trial did not happen.

is named. Access date: 1 September 2026.

¹⁶⁴Education Endowment Foundation / NFER (Lord, Dirie, Kettlewell, and Styles), Philosophy for Children effectiveness trial, 2021. 198 schools (75 intervention, 123 control), 5/5 padlock. FSM KS2 reading: ES 0.02, **0 months**, $p = 0.68$. Whole-cohort reading: ES 0.01, **0 months**. No evidence of impact on maths for the whole cohort or FSM. Pupil-survey items on explaining ideas and working with different opinions: no significant improvement. Teacher survey: 96 percent felt pupils had improved respect for others’ opinions; 93 percent felt pupils had improved ability to express views clearly. 35 of 75 intervention schools were not implementing at the expected level after two years; six did not implement at all. EEF: no plans for a further P4C trial on attainment grounds; no harm to reading and maths. Average cost on the page: £13.50 per pupil per year averaged over three years for Going for Gold. Copy **0 months** whenever Philosophy for Children is named. Access date: 1 September 2026.

¹⁶⁵Education Endowment Foundation / NFER (Lord, Dirie, Kettlewell, and Styles), Philosophy for Children effectiveness trial, 2021. 198 schools (75 intervention, 123 control), 5/5 padlock. FSM KS2 reading: ES 0.02, **0 months**, $p = 0.68$. Whole-cohort reading: ES 0.01, **0 months**. No evidence of impact on maths for the whole cohort or FSM. Pupil-survey items on explaining ideas and working with different opinions: no significant improvement. Teacher survey: 96 percent felt pupils had improved respect for others’ opinions; 93 percent felt pupils had improved ability to express views clearly. 35 of 75 intervention schools were not implementing at the expected level after two years; six did not implement at all. EEF: no plans for a further P4C trial on attainment grounds; no harm to reading and maths. Average cost on the page: £13.50 per pupil per year averaged over three years for Going for Gold. Copy **0 months** whenever Philosophy for Children is named. Access date: 1 September 2026.

Combining honestly

A family may combine. Honest combinations follow the objects' own jobs.

Library picture book plus kitchen one-change plus one module question, when the module was opened and the prompt was safe. A co-op enquiry hour later, if you can actually book one, inside a year that is still Reading. A short published guide on the shelf, used for "what do you mean?," while the object stays the ice or the door.

The child who cannot yet look, wait, and change a sentence is still in that year, whatever the birthday. The ten-year-old who cannot yet fill "I think ____ because ; **we could check by** " is still in spoken last-thoughts, whatever the workbook grade.

Combining does not mint a new course title. The record still says **Reading**, or **Science**. The description may say "picture-book discussion; kitchen one-change; dated questions in a notebook." A stranger can file that. A kitchen nickname is a kitchen nickname.

Worldview and morals are a house decision. This book teaches the move on a swing, a snack, a story, a sky, a door. It does not pick a church. It does not let an advocacy rater pick the sofa.

What "done enough" looks like

You can say, in one sentence, why this week's object fits *this* child: parent load you can actually carry, a style the house can live, a cost shape you can see, and a kitchen that does not need a school.

The programs have names. The record has titles a stranger can read. The two lists are not the same list. Philosophy for Children, whenever it is named, still carries the 2021 finding: **0 months** on reading and maths at effectiveness scale.¹⁶⁶ The

¹⁶⁶Education Endowment Foundation / NFER (Lord, Dirie, Kettlewell, and Styles), Philosophy for Children effectiveness trial, 2021. 198 schools (75 intervention, 123 control), 5/5 padlock. FSM KS2 reading: ES 0.02, **0 months**, $p = 0.68$. Whole-cohort reading: ES 0.01, **0 months**. No evidence of impact on maths for the whole cohort or FSM. Pupil-survey items on explaining ideas and working with different opinions: no significant improvement. Teacher survey: 96 percent felt pupils had improved respect for others' opinions; 93 percent felt pupils had improved ability to express views clearly. 35 of 75 intervention schools were not implementing at the expected level after two years; six did not implement at all. EEF: no plans for a further P4C trial on attainment

life of the habit is the next ordinary challenge, named and waited.

A Note on Sources

Studies named in the chapters are listed in Notes, in one series at the back. That is where the full citations live, so the teaching pages can stay a teaching voice.

Some items the research behind this book did not open stay out of the teaching voice. I did not invent a coefficient, a statute, or a product feature to fill a hole. If a study is in the chapter, it is in the notes. If we could not open it, it is not used as a finding here.

Program hours, credit claims, and product descriptions in the resources chapter are taken from the companies' own pages. Access date 1 September 2026.