

FOR EDUCATORS — FREE SAMPLE

Teacher & Parent Supplement

Companion to For the Love of Truth, Volume 1: Fundamentals

This sample includes the introduction and pacing guide,
plus the complete Chapter 1 and Chapter 18 sections.
Read the full text online, or purchase print and electronic
editions, at philaethiclogic.com.

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How to Use This Supplement

This supplement is written for a parent or teacher who has **not** necessarily studied formal logic before. Every exercise set in the student text gets three things here:

- **Teaching Notes** — the one or two things students most often get wrong in this section, explained in plain language, so you can catch a mistake even if you couldn't have symbolized the claim yourself from scratch.
- **Answer Key** — worked answers to every exercise, showing the symbolization step, not just a final letter-string, so you can see *why* an answer is right and recognize a reasonable variant when a student's wording differs from the key.
- **Quiz** — a short, gradable check for the chapter, separate from the in-text practice exercises, with its own answer key.

A note on grading logic exercises: many of the exercises in this book (especially “Distill and Simplify” type exercises) are intentionally open-ended—the text itself says “there often isn't one single ‘right’ distillation.” Where that's true, the key gives a model answer and tells you what to look for, rather than a single fixed string to match exactly. Where an exercise has one correct symbolization (most “Symbolize” exercises), the key gives that answer plainly.

Suggested Pacing Guide (Volume 1)

This is a starting proposal for a 34-week course—adjust freely. Chapters 1–2 are conceptually lighter and can move faster; Chapters 11, 16, and 17 are the densest and may need extra days. Chapters 12–13 are worked-example chapters and are lighter on new content, so they pair well with review.

Week(s)	Chapter(s)	Notes
1	Ch. 1 — Introduction to Philalethic Logic	Discussion-heavy, few formal exercises
2	Ch. 2 — Simple Ideas, Clauses, and Symbols	First real symbolization work
3–4	Ch. 3 — Quantified Claims, Abstraction, and Letter Order	
5	Ch. 4 — Negating Claims	
6	Ch. 5 — Restating Negated Claims	
7	Ch. 6 — Visualizing Clauses and Circumstances	
8	Ch. 7 — Simple Implications and Inferences	
9	Ch. 8 — Validity, Soundness, and the Anatomy of an Argument	
10	Ch. 9 — Contradiction: The Engine of Validation	
11	Review / catch-up week	Optional quiz-only week before Ch. 10
12–13	Ch. 10 — The Validation Process	
14–15	Ch. 11 — Decomposition Rules and Ordering	Densest chapter so far; consider 2 full weeks
16	Ch. 12 — Worked Validation Examples I	Lighter; mostly practice
17	Ch. 13 — Worked Validation Examples II	Lighter; mostly practice
18	Midyear review / cumulative quiz	
19	Ch. 14 — Modality: Necessity, Potential, and Possibility	
20	Ch. 15 — Compound Claims: Conjunction and Disjunction	
21–22	Ch. 16 — Compound Claims: Implication and Equivalence	Dense; the conditional trips up most students
23–24	Ch. 17 — Validating Compound Arguments	Dense; pairs everything together
25	Ch. 18 — Special Problems, Common Mistakes, and Informal Fallacies	
26	Ch. 19 — Bracketed Notation (Bonus Chapter)	Optional/enrichment depending on student pace
27	Appendix + Glossary review	
28–30	Cumulative review	
31–32	Final assessment + buffer	
33–34	Buffer / makeup days	

Chapter 1: Introduction to Philalethic Logic

Teaching Notes

This chapter has no formal symbolization exercises—it’s laying philosophical groundwork (what truth is, the three axioms, the belief/knowledge/understanding/wisdom ladder) before Chapter 2 starts building the symbolic system. Two things are worth watching for:

The true/false/withhold distinction is the one skill in this chapter with real right and wrong answers. The chapter is explicit that confusing “I don’t believe that” (withholding judgment) with “that’s false” (judging false) is a common, avoidable error—and this distinction quietly underlies everything that follows, including how negation works starting in Chapter 4. The “Belief, Doubt, or Denial?” exercise is where you can actually grade this chapter, even though the Discussion Questions are open-ended.

The chapter ends by quietly introducing the tilde (“Prepending a tilde negates the entire claim”)—this is a preview of Chapter 4’s full negation system, not something to quiz on yet, but it’s worth pointing out to a student paying close attention that this is the first appearance of the book’s actual notation.

Discussion Questions — Facilitation Guide

These are intentionally open-ended; there’s no fixed answer key. Use these as talking points to keep a discussion grounded rather than as a rubric.

- What does it mean for an idea to be true? Steer toward the chapter’s definition: correspondence to reality/the facts, not just confidence or popularity.
- Can an idea be “true for me” but not “true for you”? A good chance to distinguish genuine relativism (which the book rejects for assertoric claims) from simple disagreement about facts, or from claims that are actually about different things (preferences vs. facts).
- Difference between an idea, an opinion, a belief, and knowledge? Knowledge requires justified true belief; an “opinion” in casual usage often just means an unconfirmed belief, sometimes used to dodge the question of whether it’s actually true.
- Is it possible to know something that isn’t actually true? No, by the classical definition given in the chapter—if it’s false, it wasn’t knowledge, however confident someone was.
- Strategies for navigating a disagreement? Look for whether it’s actually a factual disagreement, a values disagreement, or a definitional one; check whether either party is confusing withholding judgment with judging false.
- Can a claim be false while its corresponding idea is somehow still true? Push toward the chapter’s treatment of ideas and their expressions as (ideally) the same thing—a mismatch usually means the claim inaccurately expressed the idea, not that truth itself is unstable.
- Why does truth matter practically? The chapter’s own framing: embracing false ideas tends toward suffering, true ideas toward peace and flourishing—ask for a concrete personal example.

Answer Key

Exercise: Belief, Doubt, or Denial?

- “I haven’t seen any evidence either way, so I don’t really have an opinion on whether the supplement works.” → Withholding judgment. Clean case, no confusion—the speaker says so directly.
- A juror says “I don’t think the defendant did it” when asked point-blank if she believes he’s innocent. → This is the confusion case the chapter warns about. “I don’t believe he’s guilty” (withholding judgment about guilt) is being treated as equivalent to “I believe he’s innocent” (a positive judgment of truth). These aren’t the same thing—the presumption of innocence works by withholding judgment on guilt, not by requiring a positive belief in innocence.
- “I’m pretty sure my flight will be on time, but I wouldn’t bet my connection on it.” → Judging true, held with

appropriate humility about confidence. Not a confusion case—she has a leaning, and isn’t mistaking that leaning for certainty.

- “Well, science hasn’t proven it’s safe,” as though that settles it’s unsafe. → Confusing “not yet confirmed true” with “judged false.” The classic absence-of-evidence trap—not having proof of safety is not the same as having proof of danger.

Chapter 1 Quiz

Part A — Short answer (3 points each)

- What are the three basic axioms of logic given in this chapter? Briefly explain non-contradiction in your own words.
- Explain the difference between knowledge and mere belief.

Part B — Belief, Doubt, or Denial? (2 points each)

- “I really doubt the rumor is true, but I can’t rule it out completely.”
- A scientist says “we haven’t found evidence of harm,” and a headline reports this as “product proven safe.”

Quiz Answer Key

- Non-contradiction, excluded middle, identity. Non-contradiction: a sufficiently clear idea can’t be both true and false at the same time and in the same way.
- Belief is just holding an idea to be true; knowledge additionally requires the idea actually be true and be justified by real evidence—a lucky correct guess is a true belief, not knowledge.
- Judging false, but held as a leaning rather than certainty (parallel to Exercise item 3, just on the opposite side—leaning false rather than leaning true).
- The headline confuses “not yet shown harmful” with “proven safe”—the same absence-of-evidence trap as the chapter’s supplement example.

Chapter 18: Special Problems, Common Mistakes, and Informal Fallacies

Teaching Notes

The three “special problems” (modes of existence, negating conclusions about nonexistent things, verb tense and stability) are conceptually subtle but low-stakes to grade—treat them as discussion material rather than gradable exercises.

The fallacy catalogue is probably the single most immediately useful content in the entire book for daily life—recommend lingering here even beyond the assigned exercises, since these patterns show up constantly in news, advertising, and family arguments.

Important gap to watch for: “Exercises: Name the Fallacy” (the first fallacy exercise set, 8 items) has no book-provided key—supplied below. Don’t confuse it with “Exercise: Name the Fallacy—Everyday Edition,” which is fully covered by the book’s own Answer Key, along with “Exercise: When Is It Even a Claim?”

Answer Key

Exercises: Name the Fallacy

- “I don’t need to defend my proposal in detail—everyone who actually understands economics already agrees with me.” → Appeal to Authority—with a circular flavor too, since “actually understands” is quietly defined as “agrees with me.”
- “Senator, you say we should raise the minimum wage. So you want to destroy every small business in this town?” → Straw Man.
- “If we allow students one retake on a quiz, next thing you know nobody will ever study for anything, and the whole grading system collapses.” → Slippery Slope.
- “This supplement must work—my neighbor took it and felt great within a week.” → Hasty Generalization—a single anecdote treated as proof.
- “Don’t listen to his argument against the merger—he was fired from that company two years ago.” → Ad Hominem.
- “You’re either fully with us on every point of the platform, or you’re against everything we stand for.” → False Dilemma.
- “The comedian’s new special is hilarious—trust me, everyone in my group chat has been quoting it all week.” → Hasty Generalization (a small, self-selected group chat isn’t good evidence of general quality)—also discussable as a bandwagon-flavored appeal to popularity, a close cousin this chapter doesn’t separately name.
- “Look, before we get into these emissions numbers, let’s talk about how many jobs this plant provides the town.” → Red Herring.

Exercise: Name the Fallacy—Everyday Edition and Exercise: When Is It Even a Claim?

The book provides its own full Answer Key (10 items) covering both exercises—no separate key is needed here.

Exercise: Find It in the Wild, Exercise: Audit One of Your Own Beliefs, and Reflection

No fixed answers—open-ended, real-world and personal exercises.

Chapter 18 Quiz

Part A — Special problems (3 points each)

- Why should “typewriters are common office equipment” probably be restated in the past tense before being used in an argument today?
- What’s the difference between an idea being merely hypothetical and an idea being an established fact, and why does it matter to keep that distinction consistent throughout a single validation?

Part B — Name the fallacy (2 points each)

- “You can’t seriously believe in that economic policy—you dropped out of college.”
- “If we ban plastic straws today, tomorrow they’ll ban plastic altogether, then all packaging, and eventually all manufacturing.”
- “Everyone in my office loves this new coffee brand, so it must be the best one on the market.”
- “Why worry about the potholes on Main Street when there are people who don’t even have roads at all?”

Part C — Short answer (4 points)

- In your own words, explain why informal fallacies can be dangerous even when—especially when—they sound persuasive.

Quiz Answer Key

- Typewriters are no longer common office equipment today, so a present-tense claim is false as stated; “typewriters were common office equipment” correctly refers to a past state of affairs instead.
- A hypothetical idea’s truth hasn’t been established, while a fact is settled and known; treating a hypothetical as though it were already established partway through an argument smuggles in an unearned premise, which can make an otherwise-empty argument look like it’s proven something it hasn’t.
- Ad Hominem.
- Slippery Slope.
- Hasty Generalization (a small, biased office sample).
- Red Herring.
- Model answer: fallacies are dangerous precisely because they mimic the surface feel of good reasoning—confident tone, a real-sounding structure, emotionally resonant framing—so the very persuasiveness that makes them effective is what disguises the fact that they don’t actually establish their conclusion. A weak, unpersuasive bad argument is easy to dismiss; a slick one can convince people, including the person making it, that something has been proven when it hasn’t.