Start here
This guide will help you get started with your Praxis or state content exam study with free online learning resources. While these resources are aimed at learners planning to teach grades K–6, an eighth-grade knowledge level in each subject is recommended for best success. Passing high-stakes standardized tests is a team effort—you are not alone!

What topics are covered in this guide?
- FAQs: What to expect from any Elementary Education Praxis or state content exam
- Discipline-specific content: individual or combined subtests
  - English Language Arts
  - Mathematics
  - Social Studies
  - Science
  - Arts, Health, Physical Education

FAQs: What to expect from any Elementary Education Praxis or State Content Exam
Is this the same thing as the Praxis Core or my state’s basic skills exam?
No, Elementary Education Praxis or state content exams are subject assessments to be completed in addition to (and preferably after) the teacher candidate has passed core or basic skills tests in reading, writing, and math. Content knowledge expectations in English and math are higher for elementary education exams than basic skills and presume greater fluency with pedagogical methods for these subjects.

Khan Academy has Praxis Core Math, Reading, and Writing help. (Reminder: Khan Academy materials in other subjects are generally at advanced high school or college level. Please do not use those as learning resources for a basic skills or elementary education subject exam.)

Should I take all subtests on the same day?
No. The exams are challenging. You would do best to schedule only one or two exams per test day, such as English plus math or English and social studies. It will not save you money if you are too mentally exhausted to do well on all subtests in a single day and need to retake one or more exams anyway.

Where can I take the exam?
You may take your Praxis or state content exam either at home with ProctorU or at a testing center; check exam sites for updated access and cost information. Follow the ETS testing center guidelines. If you take your exam at home, please test your system BEFORE exam day using these ETS Equipment Requirements.

What COVID (or other disease) protocols should I be aware of?
Please check with your local testing center before test day. If you are taking the exam at home, there may still be specific criteria to follow from the exam provider. At a testing center, you may need to bring your own mask and follow the ETS Testing Center Guidelines. These directives will be similar for any state content exam.

Can I use any calculator?
While Praxis and state content exams may allow you to use an on-screen calculator, you will not be allowed a calculator from home. You must use only those resources provided by the exam vendor; ask your exam proctor for assistance as needed. Watch this video for Praxis exam testing tools and review this information page about
Calculator Use. Each state content exam should have a similar video or written guide. You may want to practice ahead of exam day.

Can I use formula sheets?
There will be no math or science formula sheets for elementary education Praxis exams. State content exams may provide online formula sheets or tables of information with different formats or topics.

May I use anything else to help me?
You may use scratch paper at a testing center or a whiteboard at home. Be prepared to show both sides of the whiteboard to the proctor to show it is clean; if the whiteboard is bolted to the wall, show that it cannot be removed. You may use only those materials provided to you or approved by the proctor, such as pencils or whiteboard pens and erasers. Otherwise, your work area must be completely clean.

What question formats are on the exam? Multiple choice, short answer, essay, etc.?
Each exam will consist mostly of multiple-choice test items. Most questions will be standard: select one answer from four options. Some will have multiple correct answers. You may also encounter at least one “drag and drop” test item in which you are asked to move answer options to various parts of the screen.

While elementary education Praxis exams do not contain short answer or essay items, some state content exams do. For example, California’s CSET exams are famous for challenging essay items on a variety of topics in multiple disciplines.

Is there partial credit for answers that have multiple correct answers?
About 10% of each exam may involve multiple-choice items where you select more than one answer option; all responses must be correct or the entire test item will be marked wrong. There is no partial credit.

Where can I get information about accommodations?
If you need accommodation for medical or language concerns, please refer to the exam site for further guidance. Testing center locations or dates may be limited. Praxis exams provide few alternate arrangements other than additional time. See the ETS Disabilities Accommodations or ETS English Language Accommodations pages.

Is there a waiting period between attempts?
There is usually a mandatory waiting period between attempts at the Praxis or state content exams; check exam sites for more specific information.

Are there additional study guides?
Each elementary education Praxis or state content exam has a study guide or study companion provided by the publisher or state at no cost.

Discipline-Specific Content: English Language Arts
Get organized: What do you know and need to know?
The ETS Study Companion for the Elementary Education: Multiple Subjects (5001) Praxis exam includes very helpful information about the exam and preparation. We recommend reviewing these topics and identifying areas requiring further study.

• Page 5 describes the overall test, such as number of questions and time allowed.
• Pages 6–7 provide a detailed breakdown of content with each topic, which include:
  o Reading (47%)
    • Foundational Skills: phonological awareness, phonics and word analysis, and fluency
    • Literature and Informational Text: key ideas and details; features and structure of texts; point of view; integrate and compare written, visual, and oral information from texts; and text complexity
  o Writing, Speaking, and Listening (53%)
    • Writing: common writing, effective writing, developmental stages of writing, digital tools for writing, and the research process
• Language: conventions of standard English, determine the meaning of words and phrases, conventional academic and domain-specific language
• Speaking and Listening: effective collaboration, oral presentations
• Pages 44–54 go into even more detail for each content area in reading and language arts, including an example reading prompt with a visual breakdown of literary elements and example writing samples

The ETS Study Companion for the Elementary Education: Content Knowledge (5018) Praxis exam provides another view of the same content.
• Page 5 describes the overall test, such as number of questions and time allowed.
• Pages 6–8 provide a detailed breakdown of content with each topic in reading and language arts.
• Pages 37–40 go into more detail and provide discussion prompts.

Use key resources: How can you fill key knowledge gaps?
Work through the course modules in each area to deepen your understanding of the concept.

Reading Components:
• Print Awareness (Concepts of Print)
• Phonological and Phonemic Awareness
• Phonics
• Fluency
• Vocabulary
• Comprehension

Spelling and Writing:
• Spelling
• Writing

Literacy Assessment:
• Assessment

Teaching English Language Learners:
• ELL Strategies & Best Practices

Literacy-Rich Environments:
Explore the virtual classrooms to see literacy-rich classrooms and hear from experts. (Click the picture underneath the heading “Classroom Preview.”) Explore the 360° view of the classroom and click on the red information dots to hear the experts.
• Pre-K and Kindergarten
• First and Second Grade
• Third and Fourth Grade
• Fifth and Sixth Grade

15-Minute Review:
Take 15 minutes each day to review foundations of literacy skills.
1. Visit the Balanced Literacy Diet website to review the “Food Groups for Literacy.”
2. Review any “Food Group” for literacy skill you would like to learn more about.
   o Hover your cursor over “Food Groups” and a drop-down list will appear with different literacy skills.
   o Choose a topic, ex. Motivation for Literacy, Writing Conventions, etc.
3. Watch three videos that show application of each selected literacy skill.

Review Student Writing Samples:
Explore student writing samples and observations about their writing to learn more about the progression of writing skills.
1. Visit Reading Rockets’ “Looking at Writing.”
2. On the left rail of the page, select a grade level under “See Writing Samples” (Pre-K to third grade).
3. Choose two writing samples to review. (Click on the red bubbles to read the observations about the child’s writing sample.)

Target the Problem:
Explore key areas of reading difficulty and strategies to support.
1. Visit Reading Rockets’ “Target the Problem.”
2. Click “Let’s Go.”
3. Click an area to learn more about where children often have reading difficulties.

**Work through practice questions: Did you master the concepts?**
Content knowledge is not enough! You need to practice applying content knowledge and solving sample test items. Consider your test-taking strategy while you work through sample questions from reliable sources.
  - ETS offers one full-length practice exam available to purchase on the [Elementary Education 5001 Praxis Preparation Materials](https://ets.org/praxis/elementary-education-multiple-subjects) page.
- Continue with the [ETS Elementary Education 5018 Study Companion](https://ets.org/praxis/elementary-education-content-knowledge): take the English language arts section of the sample test on pages 21–22.
  - ETS offers one full-length practice exam available to purchase on the [Elementary Education 5018 Praxis Preparation Materials](https://ets.org/praxis/elementary-education-content-knowledge) page.

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**Discipline-Specific Content: Mathematics**
*Get organized: What do you know and need to know?*

The [ETS Study Companion for the Elementary Education: Multiple Subjects (5001)](https://ets.org/praxis/elementary-education-multiple-subjects) Praxis exam includes very helpful information about the exam and preparation. We recommend reviewing these topics and identifying areas requiring further study.
- Page 5 describes the overall test, such as number of questions and time allowed.
- Pages 9–13 provide a detailed breakdown of content with each topic, which include the following:
  - Numbers and operations (40%)
  - Algebraic thinking (30%)
  - Geometry and measurement, data, statistics, and probability (30%)
- Pages 55–60 go into even more detail for each content area in math, including discussion prompts to help you integrate facts, concepts, and skills. Factual recall alone is not sufficient to pass a Praxis exam; for best success, you should be able to analyze and apply content knowledge.

The [ETS Study Companion for the Elementary Education: Content Knowledge (5018)](https://ets.org/praxis/elementary-education-content-knowledge) Praxis exam provides another view of the same content.
- Page 5 describes the overall test, such as number of questions and time allowed.
- Pages 8–10 provide a detailed breakdown of content with each topic in math.
- Pages 40–44 go into more detail and provide discussion prompts.

**Work through practice questions: Did you master the concepts?**
Content knowledge is not enough! You need to practice applying content knowledge and solving sample test items. Consider your test-taking strategy while you work through sample questions from reliable sources.
- Start with the [ETS Study Companion for the Elementary Education: Multiple Subjects (5001)](https://ets.org/praxis/elementary-education-multiple-subjects) and take the sample test on pages 27–29.
  - ETS offers one full-length practice exam available to purchase on the [Elementary Education 5001 Praxis Preparation Materials](https://ets.org/praxis/elementary-education-multiple-subjects) page.
- Continue with the [ETS Elementary Education 5018: Content Knowledge Study Companion](https://ets.org/praxis/elementary-education-content-knowledge) take the math section of the sample test on pages 22–24.
  - ETS offers one full-length practice exam available to purchase on the [Elementary Education 5018 Praxis Preparation Materials](https://ets.org/praxis/elementary-education-content-knowledge) page.

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**Discipline-Specific Content: Social Studies**

*Get organized: What do you know and need to know?*

The ETS Study Companion for the Elementary Education: Multiple Subjects (5001) Praxis exam includes very helpful information about the exam and preparation. We recommend reviewing these topics and identifying areas requiring further study.

- Page 5 describes the overall test, such as number of questions and time allowed.
- Pages 13–14 provide a detailed breakdown of content with each topic, which include the following:
  - U.S. history, government, and citizenship (45%)
  - Citizenship is also called civics.
  - Geography, anthropology, and sociology (30%)
    - Anthropology refers to traditional peoples and practices; Sociology covers rural and urban concerns.
    - Neither topic is likely to comprise more than 5% of an exam.
  - World history and economics (25%)
- Pages 61–69 go into even more detail for each content area in social studies, including discussion prompts to help you integrate facts, concepts, and skills. Factual recall alone is not sufficient to pass a Praxis exam; for best success, you should be able to analyze and apply content knowledge.
- It helps to synthesize information across topics. For example, a question about the Cold War involves content from geography, U.S. history, and world history.

The ETS Study Companion for the Elementary Education: Content Knowledge (5018) Praxis exam provides another view of the same content.

- Page 5 describes the overall test, such as number of questions and time allowed.
- Pages 10–12 provide a detailed breakdown of content with each topic in social studies.
- Pages 44–48 go into more detail and provide discussion prompts.

*Use key resources: How can you fill key knowledge gaps?*

Once you determine areas requiring review, here are some recommended resources to help you deepen your content and conceptual understanding:

**History:**
- U.S. Civil War
- Colonialism vs. Imperialism
- Cold War

**Government:**
- Three Branches of U.S. Government
- U.S. Federal Budget
- Amendments to the U.S. Constitution
- Bill of Rights on 10 fingers

**Geography:**
- Latitude & Longitude
- Interactive maps – U.S., world, and region
- Interactive world map – Focus on major countries in each continent; know at least three countries per continent

**Economics:**
- Economics A–Z Glossary
- Understanding U.S. Taxes – IRS
- American Socialism– description, benefits, drawbacks, discussion questions, and resources
- Capitalism – description and types, benefits, and drawbacks

**Overall:**
- Download and use the Study Resources (Word document) and Study Plan (Word document) from ETS for the social studies section of the 5001 Praxis exam (also known as the 5004 Praxis exam).
- Download and use the Study Plan (Word document) from ETS for the social studies section of the 5018 Praxis exam.
- Use content knowledge videos from Teacher Test Prep. Free materials only, please. You will not be reimbursed for out-of-pocket expenses.
News Review Assignment:
Take **15 minutes each day** to research a news item to see social studies in context:
- Where in the U.S. or around the world does this news item occur? Look at a map to find it to place it in context.
- Why is this newsworthy? Does it pertain to U.S. government, history, or economics?
  - Look up vocabulary words, such as “impeachment” or “tariff.”
- Connect the current events news item to other social studies knowledge or historical events.
  - Ex. A recent event might be tied to an earlier event, conflict, or era.

Timeline Assignment:
Please **make a TIMELINE with U.S. history (starting in 1750) on one side and U.S. presidents on the other.** Start with one big idea for each decade and one big idea for each president.
- Example: George Washington—First U.S. President—Set example that U.S. Presidents should step down peacefully and allow other elected officials to take political power in accordance with the Constitution.
  - Use a Mindmap or Timeline tool, such as TimeGraphics, to assist if you find this helpful.
- You may work on this timeline right up until exam day. Start with the following resources:
  - USHistory.org
  - BBC News overview of U.S. history
  - White House Presidential History Timeline
  - ThoughtCo.com list of U.S. Presidents

Work through practice questions: Did you master the concepts?
Content knowledge is not enough! You need to practice applying content knowledge and solving sample test items. Consider your test-taking strategy while you work through sample questions from reliable sources.
- Start with the **ETS Study Companion for the Elementary Education: Multiple Subjects (5001)**: take the sample test on pages 30–32.
  - ETS offers one full-length practice exam available to purchase on the Elementary Education 5001 Praxis Preparation Materials page.
- Continue with the **ETS Elementary Education 5018 Study Companion**: take the social studies section of the sample test on pages 24–28.
  - ETS offers one full-length practice exam available to purchase on the Elementary Education 5018 Praxis Preparation Materials page.

Stay confident. **You can do this!**

**Discipline-Specific Content: Science**
Get organized: What do you know and need to know?
The **ETS Study Companion for the Elementary Education: Multiple Subjects (5001)** Praxis exam includes very helpful information about the exam and preparation. We recommend reviewing these topics and identifying areas requiring further study.
- Page 5 describes the overall test, such as number of questions and time allowed.
- Pages 15–16 provide a detailed breakdown of content with each topic, which include:
  - Earth Science (33%)
    - Earth science includes geology, meteorology (weather and climate), and astronomy (space science).
  - Life Science (30%)
    - Life science includes biology, botany, and ecology.
  - Physical Science (33%)
    - Physical science includes chemistry and physics.
- Pages 69–74 go into even more detail for each content area in science, including discussion prompts to help you integrate facts, concepts, and skills. Factual recall alone is not sufficient to pass a Praxis exam; for best success, you should be able to analyze and apply content knowledge.
  - It helps to synthesize information across topics—for example, a question about environmental pollution may involve content from Earth science, life science, and physical science.
The ETS Study Companion for the Elementary Education: Content Knowledge (5018) Praxis exam provides another view of the same content.

- Page 5 describes the overall test, such as number of questions and time allowed.
- Pages 12–15 provide a detailed breakdown of content with each topic in science.
- Pages 48–52 go into more detail and provide discussion prompts.

Use key resources: How can you fill key knowledge gaps?
Once you determine concept areas requiring review, here are some recommended resources:

**Earth Science:**
- Crash Course Kids – Natural Resources
- Crash Course Kids – Solar System
- Crash Course Kids – Astronomy
- Vision Learning – Earth Sciences
- Bozeman Science – Earth Sciences
- PBS – Surface Processes
- NWS – Meteorology
- Physical Geology textbook
- Earth & Space Science textbook

**Life Science:**
- Crash Course Kids – Life Science
- Amoeba Sisters – Biology
  - Amoeba Sisters Handouts
- Bozeman Science – Biology
- Crash Course – Ecology

**Physical Science:**
- Crash Course Kids – Properties of Matter
- Crash Course Kids – Gravity
- Penguin Prof—Watch only Chemistry Basics Part I + Chemistry Basics Part II
- Bozeman Science – Chemistry
- OpenStax Chemistry Textbook
  - Use “View online” mode for best results.
- Hewitt Drew-It – Physics
- Bozeman Science – Physics

**Lab Safety Videos:**
- Storing Chemicals – Flinn Scientific
- Chemical Storage Area – Flinn Scientific
- Organizing Chemicals – Flinn Scientific
- Chemical Disposal – Flinn Scientific
- Glassware Safety – Flinn Scientific
- Ventilation & Fume Hoods – Flinn Scientific

**Math Concepts in Science:**

**Math Basics:**
- Metric System – Vision Learning
- Metric System – Math Antics
- Units of Distance – Math Antics
- Scientific Notation – Tyler DeWitt
- Significant Figures – Tyler DeWitt

**Math in Science:**
- Math in Science – Vision Learning
- Graphs & Visual Data – Vision Learning
- Statistics & Graphing – Bozeman Science

**Accuracy and Precision:**
- Accuracy & Precision – TED Ed
- Accuracy & Precision – Tyler DeWitt
- Sources of Error – James Budarz
- Uncertainty, Error, Confidence – Vision Learning

**Science Inquiry, Engineering, and Society:**
There is no one way to approach scientific inquiry; what you may have learned as “scientific method” is general guidance rather than a one-size-fits-all rule, regardless of discipline.

**Science and Engineering practices:**
- HHMI BioInteractive – How Science Works
- Vision Learning – Scientific Method
- Vision Learning – Process of Science
- Crash Course Kids – Engineering
- Teach Engineering – Engineering Design Process

**Educational Standards:**
• Since 2012, most states revised their science education standards to align with A Framework for K–12 Science Education. Click on “Contents” to browse the following concepts so you can be prepared to learn about the following:
  o Nature of science
  o Crosscutting relationships among disciplines
  o Science and engineering practices in the classroom
  o The role of science, engineering, or technology in society

Work through practice questions: Did you master the concepts?
Content knowledge is not enough. You need to practice applying content knowledge and solving sample test items.
Consider your test-taking strategy while you work through sample questions from reliable sources.
• Start with the ETS Study Companion for the Elementary Education: Multiple Subjects (5001): take the sample test on pages 33–35.
  o ETS offers one full-length practice exam available to purchase on the Elementary Education 5001 Praxis Preparation Materials page.
• Continue with the ETS Elementary Education 5018 Study Companion: take the science section of the sample test on pages 25–28.
  o ETS offers one full-length practice exam available to purchase on the Elementary Education 5018 Praxis Preparation Materials page.

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Discipline-Specific Content: Arts, Health, and Physical Education
Get organized: What do you know and need to know?
The ETS Study Companion for the Health and Physical Education: Content Knowledge (5857) Praxis exam includes very helpful information about the exam and preparation. We recommend reviewing these topics and identifying areas requiring further study.
• Page 5 describes the overall test, such as number of questions and time allowed.
• Pages 6–10 provide a detailed breakdown of content with each topic, which include:
  o Health education as a discipline/health instruction (20%)
  o Health education content (25%)
  o Physical education content knowledge and student growth and development (17%)
  o Management, motivation, communication/collaboration, reflection and technology (22%)
  o Planning, instruction, and student assessment (16%)
• Pages 34–40 go into even more detail for each content area in health and physical education, including discussion prompts to help you integrate facts, concepts, and skills. Factual recall alone is not sufficient to pass a state content exam; for best success, you should be able to analyze and apply content knowledge.
  o It helps to synthesize information across topics. For example, a question about coaching strategy may involve content from health instruction, management/motivation, and student assessment.

Work through practice questions: Did you master the concepts?
Content knowledge is not enough! You need to practice applying content knowledge and solving sample test items.
Consider your test-taking strategy while you work through sample questions from reliable sources.
• Start with the ETS Praxis Study Companion: Health and Physical Education Content Knowledge (5857): take the sample test on pages 16–22.
  o ETS offers one full-length practice exam available to purchase on the Health and Physical Education 5857 Praxis Preparation Materials page.

Stay confident. You can do this!