ETS PRAXIS

Measuring the Power of Learning.®

The *Praxis*® Study Companion

Early Childhood Education

5025

www.ets.org/praxis

Welcome to *The Praxis*® *Study Companion*

Prepare to Show What You Know

You have been working to acquire the knowledge and skills you need for your teaching career. Now you are ready to demonstrate your abilities by taking a *Praxis*® test.

Using the *Praxis*® *Study Companion* is a smart way to prepare for the test so you can do your best on test day. This guide can help keep you on track and make the most efficient use of your study time.

The Study Companion contains practical information and helpful tools, including:

- An overview of the *Praxis* tests
- Specific information on the *Praxis* test you are taking
- A template study plan
- Study topics
- Practice questions and explanations of correct answers
- Test-taking tips and strategies
- Frequently asked questions
- Links to more detailed information

So where should you start? Begin by reviewing this guide in its entirety and note those sections that you need to revisit. Then you can create your own personalized study plan and schedule based on your individual needs and how much time you have before test day.

Keep in mind that study habits are individual. There are many different ways to successfully prepare for your test. Some people study better on their own, while others prefer a group dynamic. You may have more energy early in the day, but another test taker may concentrate better in the evening. So use this guide to develop the approach that works best for you.

Your teaching career begins with preparation. Good luck!

Know What to Expect

Which tests should I take?

Each state or agency that uses the *Praxis* tests sets its own requirements for which test or tests you must take for the teaching area you wish to pursue.

Before you register for a test, confirm your state or agency's testing requirements at www.ets.org/praxis/states.

How are the *Praxis* tests given?

Praxis tests are given on computer. Other formats are available for test takers approved for accommodations (see page 48).

What should I expect when taking the test on computer?

When taking the test on computer, you can expect to be asked to provide proper identification at the test center. Once admitted, you will be given the opportunity to learn how the computer interface works (how to answer questions, how to skip questions, how to go back to questions you skipped, etc.) before the testing time begins. Watch the What to Expect on Test Day video to see what the experience is like.

Where and when are the *Praxis* tests offered?

You can select the test center that is most convenient for you. The *Praxis* tests are administered through an international network of test centers, which includes Prometric® Testing Centers, some universities, and other locations throughout the world.

Testing schedules may differ, so see the *Praxis* web site for more detailed test registration information at www.ets.org/praxis/register.

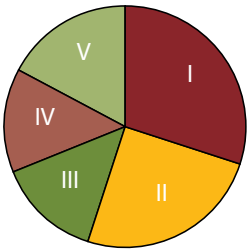
Table of Contents

The Praxis® Study Companion guides you through the steps to success

1. Learn About Your Test

Learn about the specific test you will be taking

Early Childhood Education (5025)

Test at a Glance			
Test Name	Early Childhood Education		
Test Code	5025		
Time	2 hours		
Number of Questions	120		
Format	Selected-response questions		
Test Delivery	Computer delivered		
	**Content Categories**	**Approximate Number of Questions**	**Approximate Percentage of Examination**
	I. Language and Literacy	36	30%
	II. Mathematics	30	25%
	III. Social Studies	17	14%
	IV. Science	17	14%
	V. Health and Physical Education; Creative and Performing Arts	20	17%

About This Test

The *Praxis* Early Childhood Education test is designed to assess the content knowledge that prospective early childhood teachers must have to support children's learning in the content areas.

The test covers the breadth of material a new teacher needs to know to begin practice and is aligned with state curriculum standards and national standards, such as the Next Generation Science Standards and those of the National Association for the Education of Young Children (NAEYC).

The test consists of 120 selected-response questions, each of which assesses one of six content areas: language and literacy; mathematics; social studies; science; health and physical education, and creative and performing arts. The questions help to determine whether the test taker knows the major concepts, has the skills and tools of inquiry in the content areas, can apply knowledge of the content areas in the context of children's learning, knows the structure of the content areas, and knows how the content areas are interrelated. The test does not emphasize knowledge of pedagogy, although some questions are framed in the context of children's learning. The test may contain some questions that will not count toward your score.

The use of a calculator is not permitted.

Test Specifications

Test specifications in this chapter describe the knowledge and skills measured by the test. Study topics to help you prepare to answer test questions can be found on page 34.

I. Language and Literacy

Demonstrates understanding of central concepts, skills, and tools of inquiry in language and literacy; applies that knowledge in the context of children's learning; demonstrates understanding of the structure of the content area of language and literacy; demonstrates understanding of ways in which language and literacy are integrated across content areas; demonstrates understanding of ways to make real-life connections to language and literacy.

A. Emergent Literacy: Foundational Skills

1. Recognizes various stages of language acquisition (e.g., oral language, written language -- including spelling)
2. Differentiates approaches in the planning and implementation of instruction for all students with diverse needs, including English-language learners (ELLs), students with special needs, and gifted and talented students
3. Knows how to help students develop an understanding of print awareness (e.g., environmental print, print concepts)
4. Understands the role of phonological awareness in literacy development
    a. explains the importance of phonological awareness as a foundational skill for literacy development
    b. identifies and provides examples of phonemes, syllables, onsets, and rimes
    c. identifies and provides examples of blending, segmenting, substituting, and deleting phonemes

B. Reading: Foundational Skills

1. Understands the role and importance of phonics and word analysis in literacy development
    a. knows common letter-sound correspondences and syllabication patterns (e.g., CVC, VC, CV)
    b. knows spelling conventions (e.g., irregularly spelled words, homonyms, homophones)
    c. distinguishes high-frequency sight words from decodable words appropriate for particular grades
    d. identifies roots and affixes to decode unfamiliar words
2. Understands the role of fluency in literacy development
    a. defines fluency and related terms (e.g., accuracy, rate, prosody)
    b. explains the impact of fluency on comprehension

C. Reading: Literature and Informational Text

1. Understands how to use key ideas and details to comprehend literature, informational text, and images
    a. identifies the key details, moral, and/or theme of a literary text, citing specific textual evidence
    b. identifies the key details and/or central idea of an informational text, citing specific textual evidence
    c. makes inferences from a text and supports them with appropriate evidence
    d. summarizes information from a text
    e. analyzes the characters, setting, sequencing, and plot of a literary text
    f. analyzes the relationships among individuals, events, ideas, and concepts in an informational text
2. Understands how features and structures of text across genres affect comprehension
    a. identifies structural elements of literature across genres (e.g., casts of characters and stage directions in drama, rhyme and meter in poetry)
    b. uses text features (e.g., sidebars, hyperlinks, images) to locate information in a print or digital informational text
    c. identifies organizational structures of informational (e.g., cause/effect, problem/solution, comparison) and literary text (e.g., exposition, rising action, climax, resolution)

   d. identifies how structural elements (e.g., header, graphs, images) contribute to the development of informational and literary text

3. Understands the concept of point of view using evidence from the text
   a. identifies author's point of view in various genres and supports conclusions with evidence from the text
   b. compares multiple points of view about the same event or topic
   c. identifies how point of view affects the overall structure of a literary or informational text
4. Understands how to integrate and compare written, visual, and oral information from texts and multimedia sources
   a. explains how visual and oral elements enhance the meaning and effect of a literary text (e.g., picture book, graphic novel, multimedia presentation)
   b. compares the written version of a literary text with an oral, staged, or digital version
   c. compares two or more texts (literary and/or informational) that address the same theme or topic
   d. interprets visual and multimedia elements in literary and informational texts
5. Knows the role of text complexity in reading development
   a. explains the factors that contribute to text complexity (e.g., vocabulary, sentence complexity, images)
   b. identifies and uses multiple text-leveling systems
   c. selects appropriate texts for readers at various levels

D. Writing

1. Knows the developmental stages of writing
   a. identifies a developmentally appropriate continuum of writing (e.g., drawing, scribbling, combining strings of letters)
   b. recognizes strategies to support the development of emergent writing (e.g., copying print, understanding how print conveys a message)
   c. identifies a developmentally appropriate continuum of spelling
2. Understands the characteristics of common types of writing
   a. distinguishes among common types of writing (e.g., opinion/argument, informative/explanatory, narrative)
   b. identifies the purpose, key components, and subgenres (e.g., advertisements, recipes, narrative poems) of each common type of writing
   c. evaluates the effectiveness of writing samples of each type
3. Understands the authoring cycle of writing
   a. identifies steps of the authoring cycle (e.g. brainstorming, outlining, publishing)
   b. identifies the interrelationships among planning, revising, and editing in the process of writing
4. Understands the characteristics of effective writing
   a. evaluates the appropriateness of a particular piece of writing for a specific task, purpose, or audience
   b. evaluates the development, organization, or style of a piece of writing
   c. identifies appropriate revisions to strengthen a sample of writing
   d. recognizes writing that is clear and coherent and understands its elements (e.g. support, conclusion, sequence)
5. Knows the purpose of digital media literacy for production and distribution of writing
   a. identifies the characteristics and purposes of a variety of digital tools for producing and publishing writing
   b. selects the appropriate digital tools for a specific purpose and audience
6. Knows the research process that builds knowledge about a topic
   a. identifies the steps in the research process
   b. distinguishes between primary and secondary sources and their uses
   c. distinguishes between paraphrasing and plagiarizing
   d. knows how to locate credible print and digital sources, locate information within the sources, and cite the sources

E. Speaking and Listening

1. Knows the characteristics of effective collaborative conversations
   a. identifies techniques to communicate for a variety of purposes
   b. identifies the characteristics of active listening
   c. knows strategies for promoting conversations (e.g., types of questions, modeling metacognition, providing opportunities)
2. Knows the characteristics of engaging oral presentations
   a. identifies elements of engaging oral presentations (e.g., volume, articulation, awareness of audience, eye contact)
   b. differentiates between formal and informal language use (e.g., code switching)
   c. identifies the characteristics of being a respectful audience member

F. Language

1. Knows the conventions of Standard English grammar, usage, mechanics, and spelling.
   a. explains the function of different parts of speech and spelling
   b. corrects errors in usage, mechanics
   c. identifies examples of different sentence types (e.g., simple, compound, compound-complex)
   d. identifies how varieties of English (e.g., dialects, registers) used in stories, dramas, or poems support the overall meaning
2. Understands how to determine the meaning of words and phrases
   a. determines the literal meaning of unknown words and phrases from context, syntax, and/or knowledge of roots and affixes
   b. identifies types of figurative language
   c. interprets figurative language
   d. analyzes the relationship between word choice and tone in a text
   e. uses images and texts to determine the meaning of unknown words and phrases
3. Understands characteristics of conversational, academic, and domain-specific language
   a. differentiates among tiered vocabulary (e.g., common words, multiple meaning words, content-specific words)
   b. identifies relevant features of language such as word choice, word order, and punctuation

II. Mathematics

Demonstrates understanding of central concepts, skills, and tools of inquiry in mathematics; applies that knowledge in the context of children's learning; demonstrates understanding of the structure of the content area of mathematics; demonstrates understanding of a variety of strategies to determine the reasonableness of results; demonstrates understanding of ways in which mathematics is integrated across the content areas; demonstrates understanding of ways to make real-life connections to mathematics

Note: Mathematics questions on the test assess test takers' understanding of fundamental mathematical skills and concepts central to the early childhood and early elementary curriculum, as described in the topic list below. Most questions are posed in the context of children's learning; few questions present purely computational mathematics problems.

A. Emergent Mathematics: Foundational Skills

1. Understands the prerequisite skills that relate to future mathematical concept development including but not limited to the following.
   a. recognizes patterns
   b. uses one-to-one correspondence
   c. uses grouping and classification by one or more attributes
   d. uses subitizing (instantly recognizing how many)
   e. uses sequencing and conservation of number
   f. uses simple directions related to position and proximity
   g. represents numbers in multiple ways
   h. uses counting and cardinality principles

B. Numbers and Operations—Whole Numbers

1. Understands the processes, skills, and concepts related to the place-value system
   a. compares and orders whole numbers
   b. composes and decomposes multidigit numbers
   c. given a digit, identifies the place the digit is in and its value in that place
   d. recognizes that a digit in one place represents ten times what it represents in the place to its right and one-tenth what it represents in the place to its left
   e. rounds multidigit numbers to any place value
   f. represents numbers in expanded form
2. Knows how to apply appropriate mental strategies
   a. recognizes patterns, math facts, composition and decomposition of numbers, and compensation as mental strategies
   b. selects and utilizes appropriate strategies
3. Understands processes, skills, and concepts related to operations and properties of operations involving whole numbers
   a. uses understanding of place-value and properties of operations to add, subtract, multiply, and divide
   b. uses concrete models, drawings, and number lines to illustrate, interpret, and explain addition, subtraction, multiplication, and division of whole numbers, including multidigit numbers
   c. illustrates and explains multiplication and division problems using equations, rectangular arrays, area models, and partitioning
   d. uses various strategies and algorithms to perform operations on whole numbers, including multidigit numbers, and interprets the remainder in division problems
   e. uses the four operations (addition, subtraction, multiplication, and division) to solve multistep mathematical and real-life problems involving whole numbers and determines whether answers are reasonable
   f. identifies different problem situations (e.g., adding to, taking away from, comparing)
   g. uses the relationship between operations to solve problems (e.g., inverse operations, repeated addition, repeated subtraction)

C. Numbers and Operations—Fractions

1. Understands the multiple representations and meanings of a fraction
   a. converts fractions to decimals and percents
   b. recognizes that a fraction represents a division problem, ratio, or remainder
2. Understands the processes, skills, and concepts for working with rational fractions
   a. represents fractions using visual fraction models, sets of objects, grids, area models, and number lines
   b. composes and decomposes fractions and understands the use of unit fractions
   c. recognizes that the value of a unit fraction decreases as the value of the denominator increases
   d. writes and uses equivalent fractions to compare fractions
   e. explains why the same whole must be used when comparing fractions
   f. recognizes that when the numerator and denominator are the same number, the fraction is equal to one
   g. recognizes that any whole number can be written as itself over on

D. Algebraic Thinking

1. Knows the processes, skills, and concepts for working with patterns
   a. identifies, extends, describes, or generates number, shape, and other repeating patterns
   b. makes conjectures, predictions, or generalizations based on patterns
2. Knows the properties of the four operations and the processes, skills, and concepts for solving problems
   a. identifies arithmetic patterns (including patterns in the addition table and in the multiplication table) and explains the patterns using properties of operations
   b. applies properties of operations (i.e., commutative, associative, distributive) and uses them as strategies to add, subtract, multiply, and divide

c. uses the order of operations to solve multistep problems

d. represents and solves word problems involving the four operations using equations with a variable representing the unknown in any position

E. Geometry, Measurement, and Data

1. Understands the processes, skills, and concepts for reasoning about shapes and their attributes
   a. classifies and compares shapes according to their attributes
   b. composes and decomposes two- and three-dimensional shapes
   c. partitions shapes into parts with equal areas and describes the area of each part as a fraction of the entire area of the shape
2. Understands the processes, skills, and concepts for solving problems involving measurement and estimation using standard and nonstandard units of measure
   a. solves problems involving elapsed time, money, length, volume, and mass
   b. solves mathematical and real-life problems involving perimeter and area of polygons
   c. relates the concept of area to the operations of multiplication and addition
   d. uses relative sizes of United States customary units and metric units
3. Understands the processes, skills, and concepts for representing and interpreting data
   a. collects, organizes, and represents data
   b. interprets data presented in various formats (e.g., picture graph, bar graph, line plot)

III. Social Studies

Demonstrates understanding of central concepts, skills, and tools of inquiry in the social sciences; applies that knowledge in the context of young children's learning and social and emotional development; demonstrates understanding of the structure of the content areas of social studies; demonstrates understanding of ways in which social studies and social skills are integrated across the content areas; demonstrates understanding of ways to make real-life connections to social studies

A. Identity, Social, and Emotional Development

1. Understands the process of exploring, identifying, and analyzing identity, individual development, and relationships to others (e.g., self-concept, self-awareness, and self-regulation and how they develop)
   a. understands interpersonal relationships (e.g., norms of social behavior)
   b. selects appropriate tools for teaching group social skills (e.g., conflict resolution)
   c. understands the influence of family, community, and social systems (e.g., the ways in which social systems influence daily life and personal choices)
   d. understands how institutions (e.g., religious, academic, government) influence individual identity, relationships, beliefs, and behaviors
   e. understands how to promote emotional development and regulation

B. Culture and Cultural Identity

1. Knows the components of culture and why the study of culture is important
   a. knows ways in which families, groups, societies, and cultures address similar human wants, needs, and concerns
   b. knows ways in which cultural perspectives shape experiences and perceptions
   c. understands the influence of language, literature, music, and artistic creations as expressions of culture and people
   d. knows ways in which people from different cultures perceive and interact with the physical environment and social conditions
   e. understands the concepts of unity and diversity within and across groups
   f. understands the concepts of interdependence and intradependence between and among cultural groups

C. People, Places, and Environments

1. Understands spatial thinking, geographic perspectives, and the relationship between human beings and their environment
   a. understands geographic concepts (e.g., region, measurement, directional terms, landmarks, distance, location)
   b. understands geographic literacy skills (e.g., the construction and use of maps, graphs, charts, and technology)
   c. knows the physical and human-made characteristics of different places and how they affect human behavior and experience (e.g., rain forest, desert, urban and rural communities)
   d. understands the interdependence of living things, the environment, and the economy

D. Time, Continuity, and Change

1. Knows ways in which human beings seek to understand their historical roots and to locate themselves in time
   a. understands chronological thinking skills
   b. knows how to analyze historical data (e.g., time lines, maps, graphs, and tables)

E. Civics and Government

1. Understands the importance of civic participation and how people create and change structures of power, authority, and governance
   a. understands key civics concepts (e.g., human dignity, justice, equality, equity, tolerance, rule of law, citizenship)
   b. understands civic participation in the context of classroom, community, nation, and world (e.g., raising an issue, making an informed decision, considering other perspectives, balancing individual and group needs)

IV. Science

Demonstrates understanding of central concepts, skills, and tools of inquiry in science; applies that knowledge in the context of children's learning; demonstrates understanding of the structure of the content area of science; demonstrates understanding of ways in which science is integrated across the content areas demonstrates understanding of ways to make real-life connections to science

A. Fundamental Concepts and Processes of Scientific Inquiry

1. Understands fundamental concepts and processes of scientific inquiry across and within the various scientific disciplines of physical science, Earth and space science, life science, and engineering and technology
   a. knows unifying science concepts (e.g., systems, cycles, constancy, and change)
   b. understands the scientific process (e.g., formulating questions, testing hypotheses, and communicating information to help explain the world)
   c. understands basic science skills (e.g., observing, describing, and classifying; making inferences; communicating and representing findings; using simple tools; collecting and analyzing data)

B. Physical Science

1. Understands the basic phenomena of the physical world
   a. understands the concept of properties of objects and materials (e.g., states of matter)
   b. knows the forms of energy, including light, heat, electricity, and magnetism, and their related concepts (e.g., reflection, and absorption of light; push and pull; production and conduction of heat)
   c. knows the concepts of position and motion of objects (e.g., the position and motion of an object can be changed by exerting force)

C. Earth and Space Science

1. Knows the basic phenomena of Earth and space
   a. knows objects seen in the sky and their properties, movements, and locations (e.g., Sun, Moon, stars)
   b. understands how changes that occur on Earth and in space (e.g., daily weather and daylight patterns, erosion) can affect seasonal and daily weather and daylight patterns
   c. understands the properties of Earth materials (e.g., different physical and chemical properties of Earth materials, including solid rocks and soils, fossils, water, and gases)

D. Life Science

1. Understands living organisms and natural systems
   a. understands the basic characteristics of organisms and their environments (e.g., basic needs and behaviors, structures that support growth, habitats)
   b. understands the life cycles of organisms including the inheritance of traits
   c. understands the interdependent relationships in ecosystems

E. Engineering, Technology and Applications of Science

1. Is familiar with methods of facilitating problem solving through inventing solutions to simple problems
   a. recognizes situations where change and improvement may be possible
   b. develops possible solutions to existing problems through sketches, drawings, and physical models
   c. compares and tests multiple solutions to determine the solution that best solves the problem
2. Knows appropriate technology to support scientific inquiry across domains

V. Health and Physical Education, Creative and Performing Arts

A. Health and Physical Education

Demonstrates understanding of central concepts, skills, and tools of inquiry in health education, physical education; applies that knowledge in the context of children's learning; demonstrates understanding of the structure of the content areas of health and physical education; demonstrates understanding of ways in which health and physical education are integrated across the content areas

1. Health
   a. Knows fundamental health concepts and skills
      – understands health promotion, wellness, and disease prevention
      – recognizes major risks to children's health and safety and the prevention of those risks
      – knows the basic structure and function of human body systems and how they interrelate
      – understands how mental and emotional health factors have an effect on overall health (e.g., personal, family, communication, relationships)
      – knows how to access and use a variety of resources to help students cope with mental and emotional health needs (e.g., referrals to appropriate health care professionals, conflict resolution, decision making)
      – recognizes environmental, community, and consumer health issues affecting personal health (e.g., pollution, health care)
      – knows the harmful effects of alcohol, tobacco, and other drugs
      – knows the importance of maintaining a healthy and nutritious diet
      – knows the impact of health on learning and development across the content areas

2. Physical Education
   a. Knows fundamental physical education concepts and skills
      – understands motor development and motor learning, including typical and atypical developmental progression and activities that promote development (e.g., skill themes, movement concepts)
      – knows the components of health-related fitness (e.g., muscular strength and endurance, cardiovascular fitness, flexibility, body composition) and skill-related fitness (e.g., agility, balance, power, speed) and how to achieve and maintain physical fitness
      – knows the ways in which physical activity provides lifelong opportunities for learning, enjoyment, challenge, self-expression, and social interaction
      – knows the impact that physical activity and fitness have on learning and development across content areas

B. Creative and Performing Arts

Demonstrates understanding of central concepts, skills, and tools of inquiry in creative and performing arts; applies that knowledge in the context of children's learning; demonstrates understanding of the structure of the content areas of creative and performing arts; demonstrates an understanding of ways in which the arts are integrated across the content areas; demonstrates understanding of ways to make real-life connections to creative and performing arts

1. Purposes and Functions of the Arts
   a. knows why works of art are created and the processes for responding to works of art
      – knows the purposes of visual and performing arts creation
      – knows the materials and processes used to respond to works of art
      – knows the interrelationships within the visual and performing art disciplines
      – knows the connections between the visual and performing arts across disciplines

2. Structure and Processes Within the Arts
   a. knows basic terminology, elements, principles, materials, and processes utilized in visual art, music, dance, and theater
      – knows the terminology, components, and elements of arts creation (e.g., color, line, shape, texture, harmony, melody, pitch, tempo)
      – knows the organizing principles of arts creation (e.g., rhythm, contrast, balance, unity, scale, movement, pattern)
      – knows the materials and processes used to create and perform works of art
      – knows the ways in which visual and performing arts activities create opportunities for appreciation, enjoyment, learning, self-expression, and social interaction
      – knows the ways in which artistic practice informs, enriches, and complements teaching and learning

2. Familiarize Yourself with Test Questions

Become comfortable with the types of questions you'll find on the Praxis *tests*

The *Praxis* assessments include a variety of question types: constructed response (for which you write a response of your own); selected response, for which you select one or more answers from a list of choices or make another kind of selection (e.g., by clicking on a sentence in a text or by clicking on part of a graphic); and numeric entry, for which you enter a numeric value in an answer field. You may be familiar with these question formats from taking other standardized tests. If not, familiarize yourself with them so you don't spend time during the test figuring out how to answer them.

Understanding Computer-Delivered Questions

Questions on computer-delivered tests are interactive in the sense that you answer by selecting an option or entering text on the screen. If you see a format you are not familiar with, read the directions carefully. The directions always give clear instructions on how you are expected to respond.

For most questions, you respond by clicking an oval to select a single answer from a list of answer choices.

However, interactive question types may also ask you to respond by:

- **Clicking more than one oval** to select answers from a list of choices.
- **Typing in an entry box.** When the answer is a number, you may be asked to enter a numerical answer. Some questions may have more than one place to enter a response.
- **Clicking check boxes.** You may be asked to click check boxes instead of an oval when more than one choice within a set of answers can be selected.
- **Clicking parts of a graphic.** In some questions, you will select your answers by clicking on a location (or locations) on a graphic such as a map or chart, as opposed to choosing your answer from a list.
- **Clicking on sentences.** In questions with reading passages, you may be asked to choose your answers by clicking on a sentence (or sentences) within the reading passage.
- **Dragging and dropping answer choices into targets on the screen.** You may be asked to select answers from a list of choices and drag your answers to the appropriate location in a table, paragraph of text or graphic.
- **Selecting answer choices from a drop-down menu.** You may be asked to choose answers by selecting choices from a drop-down menu (e.g., to complete a sentence).

Remember that with every question you will get clear instructions.

Perhaps the best way to understand computer-delivered questions is to view the Computer-delivered Testing Demonstration on the Praxis web site to learn how a computer-delivered test works and see examples of some types of questions you may encounter.

Understanding Selected-Response Questions

Many selected-response questions begin with the phrase "which of the following." Take a look at this example:

Which of the following is a flavor made from beans?

(A) Strawberry

(B) Cherry

(C) Vanilla

(D) Mint

How would you answer this question?

All of the answer choices are flavors. Your job is to decide which of the flavors is the one made from beans.

Try following these steps to select the correct answer.

1) **Limit your answer to the choices given.** You may know that chocolate and coffee are also flavors made from beans, but they are not listed. Rather than thinking of other possible answers, focus only on the choices given ("which of the following").

2) **Eliminate incorrect answers.** You may know that strawberry and cherry flavors are made from fruit and that mint flavor is made from a plant. That leaves vanilla as the only possible answer.

3) **Verify your answer.** You can substitute "vanilla" for the phrase "which of the following" and turn the question into this statement: "Vanilla is a flavor made from beans." This will help you be sure that your answer is correct. If you're still uncertain, try substituting the other choices to see if they make sense. You may want to use this technique as you answer selected-response questions on the practice tests.

Try a more challenging example

The vanilla bean question is pretty straightforward, but you'll find that more challenging questions have a similar structure. For example:

Entries in outlines are generally arranged according to which of the following relationships of ideas?

(A) Literal and inferential

(B) Concrete and abstract

(C) Linear and recursive

(D) Main and subordinate

You'll notice that this example also contains the phrase "which of the following." This phrase helps you determine that your answer will be a "relationship of ideas" from the choices provided. You are supposed to find the choice that describes how entries, or ideas, in outlines are related.

Sometimes it helps to put the question in your own words. Here, you could paraphrase the question in this way: "How are outlines usually organized?" Since the ideas in outlines usually appear as main ideas and subordinate ideas, the answer is (D).

QUICK TIP: Don't be intimidated by words you may not understand. It might be easy to be thrown by words like "recursive" or "inferential." Read carefully to understand the question and look for an answer that fits. An outline is something you are probably familiar with and expect to teach to your students. So slow down, and use what you know.

Watch out for selected-response questions containing "NOT," "LEAST," and "EXCEPT"

This type of question asks you to select the choice that does not fit. You must be very careful because it is easy to forget that you are selecting the negative. This question type is used in situations in which there are several good solutions or ways to approach something, but also a clearly wrong way.

How to approach questions about graphs, tables, or reading passages

When answering questions about graphs, tables, or reading passages, provide only the information that the questions ask for. In the case of a map or graph, you might want to read the questions first, and then look at the map or graph. In the case of a long reading passage, you might want to go ahead and read the passage first, noting places you think are important, and then answer the questions. Again, the important thing is to be sure you answer the questions as they refer to the material presented. So read the questions carefully.

How to approach unfamiliar formats

New question formats are developed from time to time to find new ways of assessing knowledge. Tests may include audio and video components, such as a movie clip or animation, instead of a map or reading passage. Other tests may allow you to zoom in on details in a graphic or picture.

Tests may also include interactive questions. These questions take advantage of technology to assess knowledge and skills in ways that standard selected-response questions cannot. If you see a format you are not familiar with, **read the directions carefully**. The directions always give clear instructions on how you are expected to respond.

QUICK TIP: Don't make the questions more difficult than they are. Don't read for hidden meanings or tricks. There are no trick questions on *Praxis* tests. They are intended to be serious, straightforward tests of your knowledge.

Understanding Constructed-Response Questions

Constructed-response questions require you to demonstrate your knowledge in a subject area by creating your own response to particular topics. Essays and short-answer questions are types of constructed-response questions.

For example, an essay question might present you with a topic and ask you to discuss the extent to which you agree or disagree with the opinion stated. You must support your position with specific reasons and examples from your own experience, observations, or reading.

Take a look at a few sample essay topics:

- "Celebrities have a tremendous influence on the young, and for that reason, they have a responsibility to act as role models."
- "We are constantly bombarded by advertisements—on television and radio, in newspapers and magazines, on highway signs, and the sides of buses. They have become too pervasive. It's time to put limits on advertising."
- "Advances in computer technology have made the classroom unnecessary, since students and teachers are able to communicate with one another from computer terminals at home or at work."

Keep these things in mind when you respond to a constructed-response question

1) **Answer the question accurately.** Analyze what each part of the question is asking you to do. If the question asks you to describe or discuss, you should provide more than just a list.

2) **Answer the question completely.** If a question asks you to do three distinct things in your response, you should cover all three things for the best score. Otherwise, no matter how well you write, you will not be awarded full credit.

3) **Answer the question that is asked.** Do not change the question or challenge the basis of the question. You will receive no credit or a low score if you answer another question or if you state, for example, that there is no possible answer.

4) **Give a thorough and detailed response.** You must demonstrate that you have a thorough understanding of the subject matter. However, your response should be straightforward and not filled with unnecessary information.

5) **Reread your response.** Check that you have written what you thought you wrote. Be sure not to leave sentences unfinished or omit clarifying information.

QUICK TIP: You may find that it helps to take notes on scratch paper so that you don't miss any details. Then you'll be sure to have all the information you need to answer the question.

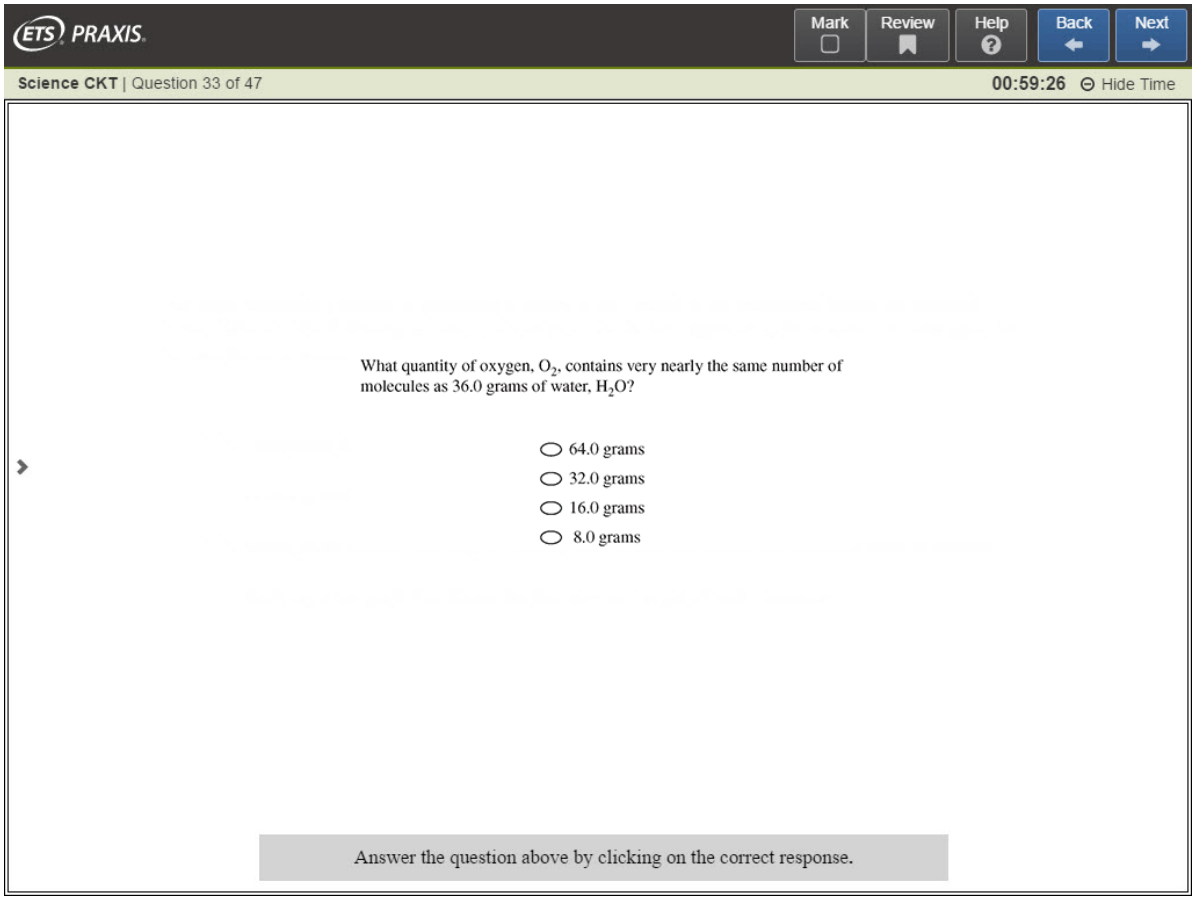
For tests that have constructed-response questions, more detailed information can be found on page 5.

3. Practice with Sample Test Questions

Answer practice questions and find explanations for correct answers

Computer Delivery

This test is available on computer. The following sample question provides a preview of an actual screen used in a computer-delivered test. For the purposes of this Study Companion, the sample questions are shown as they would appear in a paper-delivered test.



Sample Test Questions

The sample questions that follow illustrate the kinds of questions on the test. They are not, however, representative of the entire scope of the test in either content or difficulty. Answers with explanations follow the questions.

Directions: Each of the questions or incomplete statements below is followed by four suggested answers or completions. Select the one that is best in each case. For the computer-delivered test, select the answer by clicking on the answer choice. For the paper-delivered test, fill in the corresponding lettered space on the answer sheet with a heavy, dark mark so that you cannot see the letter.

Language and Literacy

1. A teacher reads aloud *Where the Wild Things Are*, a picture storybook in which a boy named Max encounters wild monsters that are vividly portrayed. The teacher then shows the students picture cards depicting scenes from the beginning, middle, and end of the story. Which of the following concepts of literary structure is the teacher helping students understand?

   (A) Plot sequence
   (B) Point of view
   (C) Character development
   (D) Setting

2. A teacher provides support for small, flexible groups of beginning readers. As students read a text or a book that is unfamiliar to them, the teacher works with the students to teach them how to use a variety of reading strategies. Which of the following reading approaches is described?

   (A) Direct instruction
   (B) Literature circle
   (C) Guided reading
   (D) Read-aloud

3. Which of the following criteria is the most important when assessing reading comprehension?

   (A) Ability to spell inventively
   (B) Ability to decode new words
   (C) Ability to identify the main idea
   (D) Ability to recognize rhyming patterns

4. After a visit to a rescue squad, Ms. Espinosa asks her 3-year-old students to help her write a thank-you letter to the rescue squad employees. She records the students' responses on a large sheet of chart paper as the students share their ideas. While writing, Ms. Espinosa focuses the students' attention on several early literacy skills. Which of the following is the most appropriate focus for 3-year-old students?

   (A) Paraphrasing ideas
   (B) Spelling words correctly
   (C) Expressing speech in print
   (D) Capitalizing proper nouns

5. A kindergarten teacher sets up a literacy center with an activity that asks students to match pictures of objects with pictures of letters to correctly indicate the beginning sound. Which of the following is the teacher trying to develop in students through the center?

   (A) Phonics
   (B) Vocabulary
   (C) Letter recognition
   (D) Phonemic awareness

6. Which of the following statements best illustrates active listening on the part of a second-grade teacher who is helping a student solve a personal problem?

   (A) "I have gathered the facts, and I know what really happened."
   (B) "I understand you, and I know what is best for you."
   (C) "I believe you understood the class rules."
   (D) "I respect you as a person with your own ideas and feelings."

7. Which of the following words cannot be decoded through knowledge of letter-sound relationships?

   (A) Flight
   (B) Said
   (C) Things
   (D) Lamp

8. The boy is very quiet.

   The sentence above is an example of which of the following?

   (A) Simple sentence
   (B) Complex sentence
   (C) Compound sentence
   (D) Compound-complex sentence

9. Which of the following stages is the first step in the writing cycle?

   (A) Outlining
   (B) Brainstorming
   (C) Publishing
   (D) Editing

Mathematics

10. A second-grade teacher has each student select a card at random that is marked with a three-digit number. Students then model their numbers with base ten blocks on a place value mat. Which of the following whole number concepts does the lesson best reinforce?

    (A) Comparing quantities
    (B) Describing quantities
    (C) Ordering quantities
    (D) Decomposing quantities

11. The gasoline tank in a car holds 15 gallons when full. If there are 7 gallons of gasoline in the tank, how many gallons of gasoline are needed to fill the tank?

    Which of the following is most appropriate to use to correctly answer the question shown?

    (A) Multiplication
    (B) Subtraction
    (C) Estimation
    (D) Division

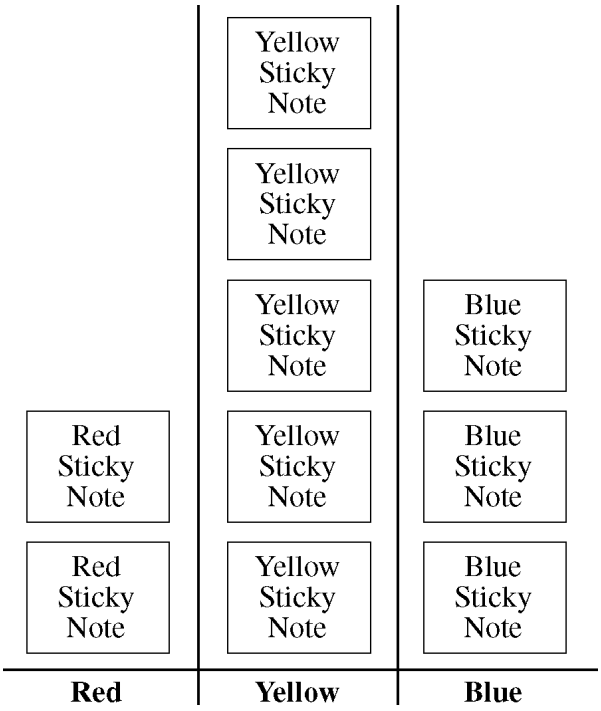
12. A prekindergarten teacher uses a basket of red and yellow apples to reinforce concepts during a mathematics lesson. Which of the following tasks is best targeted at teaching students to compare quantities?

    (A) Having students count all the apples in the basket
    (B) Having students put one apple in the middle of the place mat on their desks
    (C) Having students make a Venn diagram for the color of the apples
    (D) Having students determine whether the numbers of red and yellow apples are equal

13. A prekindergarten teacher is planning a lesson with a teaching objective of categorizing geometric objects by type of shape. Which of the following actions must children be able to perform successfully before the teacher teaches the lesson?

    (A) Identifying attributes of objects
    (B) Recognizing the position of whole numbers
    (C) Creating sets of objects using counters
    (D) Matching values with their numerical representatives

14. A preschool teacher has each of the ten students in the class pick their favorite color of sticky note from red, yellow, and blue notes. Students then work with the teacher to create a chart of their color selections.



Which of the following math skills does the activity best reinforce?

(A) Pattern recognition

(B) Conservation of numbers

(C) Intuitive concept of chance

(D) Data collection, organization, and display

15. A kindergarten teacher has students determine the following.

- How many students are absent that day
- If there are enough snack cups for each student to have one during snack time
- How many balls are taken outside during recess and how many are brought back inside after recess.

Which of the following concepts is most closely aligned with the determinations the teacher is having the students make?

(A) Classifying

(B) Counting

(C) Patterning

(D) Ordering

16. A first-grade teacher is planning activities to introduce students to nonstandard units of measurement. Which of the following activities will best meet the teacher's goal?

(A) Asking students to stand in a line, from the shortest person to the tallest

(B) Asking students to use pencils to measure the length of a desk

(C) Asking students to determine how many one-liter bottles of water can fill a one-gallon container

(D) Asking students to use a measuring tape to measure the length of the classroom door

17. A third-grade teacher provides groups of students with standard sets of fraction pieces. The teacher displays a fraction circle piece representing $\frac{1}{2}$ and then asks the students to use other fraction pieces identical to each other but different from the one that represents $\frac{1}{2}$ to model the $\frac{1}{2}$ piece. Which of the following is most likely the primary purpose of the activity?

(A) Ordering unit fractions

(B) Adding rational numbers

(C) Finding equivalent fractions

(D) Converting fractions to percents

Social Studies

18. As a quick assessment of lesson vocabulary, a teacher writes the following definition on the board.

A set of expected behaviors for citizens who hold particular positions in society

The teacher then asks students to write on their whiteboard the vocabulary word related to the definition. Which of the following students wrote the correct word?

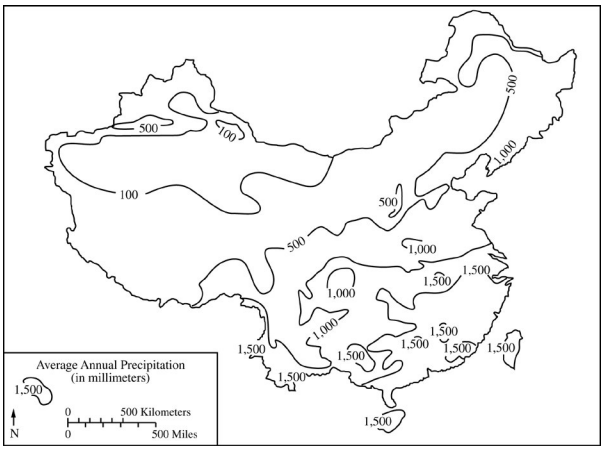
(A) Bob, who wrote "influence"

(B) Danielle, who wrote "roles"

(C) Mike, who wrote "laws"

(D) Gretchen, who wrote "ethos"

19. A teacher is presenting a unit on the ways in which people from different cultures deal with their physical environment. The teacher wants students to understand that different parts of the environment can affect people differently. The map below shows which of the following to be true about precipitation in China?



(A) The north receives more precipitation than the south.

(B) The driest region is the northeast.

(C) The southeast receives the most precipitation.

(D) The west receives more precipitation than the east.

20. A kindergarten teacher notices that a new student who is from a foreign country is being excluded from play by a majority of the other students. Which of the following activities is best to help the class become aware of the common interests they share with the new student?

(A) Inviting a member of the new student's family to discuss the family's culture with the class

(B) Creating a chart with the class that shows the many ways students in the class are similar

(C) Using a globe to show the class which country the new student's family comes from

(D) Asking the class to help the new student learn the classroom rules by having students role-play

21. Ethan, a new preschool student, does not talk or play with other students during center time. Which of the following strategies will best help him develop interpersonal relationships?

(A) Demonstrating empathy for Ethan when there is a conflict during center time

(B) Modeling how to show appropriate affection in the classroom

(C) Encouraging students to name and discuss their feelings throughout the day

(D) Identifying a student to be Ethan's partner and participate in center time with him

Science

22. Which of the following is an example of a chemical change?

(A) Tearing up a piece of paper

(B) Melting ice

(C) Mixing vinegar with baking soda

(D) Filling a balloon with air

23. The ability to do which of the following is a characteristic of all living organisms?

(A) Move from place to place

(B) Detect and respond to changes in the environment

(C) Produce sugars by photosynthesis

(D) Produce heat to maintain a constant internal temperature

24. Which of the following activities will be most effective in introducing kindergartners to the concept of how plants transport water?

(A) Demonstrating that a celery stalk can be peeled lengthwise but not crosswise

(B) Placing celery stalks in water colored with a dye and observing the results

(C) Collecting rainwater in a rain gauge and comparing the amount of rainfall to a plant's growth rate

(D) Planting bean seeds in paper cups, placing them on the windowsill, and watering them daily

25. Students in a fourth-grade science class are learning about processes that change Earth's surface. Which of the following is the best example of an agent that gradually shapes Earth's surface by taking bits of rock, soil, and other substances away from their original locations and depositing them in other locations?

    (A) Fire
    (B) Lightning
    (C) Water
    (D) Sunlight

Health and Physical Education, Creative and Performing Arts

26. A preschool teacher is teaching students to forward roll. Which of the following is a problem most characteristic of preschoolers' forward rolling?

    (A) Keeping the chin tucked
    (B) Keeping the knees and hips flexed
    (C) Losing the curl
    (D) Using the hands to cushion the head contact

27. A preschool teacher is teaching students about a color wheel, which is an organization of hues around a circle. Red, yellow, and blue are examples of which of the following kinds of colors on the color wheel?

    (A) Complementary
    (B) Primary
    (C) Secondary
    (D) Tertiary

28. Which of the following dental topics is developmentally appropriate for toddlers?

    (A) Growth of permanent teeth
    (B) Correct use of incisors while eating
    (C) Correct toothbrushing technique
    (D) Evolution of the human tooth

29. An elementary school student is able to follow fast and slow songs by playing appropriate rhythm patterns on the drum. Which of the following attributes of music does the student understand?

    (A) Dynamics
    (B) Pitch
    (C) Tempo
    (D) Harmony

30. Which of the following skills must be mastered before a child can learn to skip?

    (A) Hopping
    (B) Running
    (C) Walking backward
    (D) Crab walking

Answers to Sample Questions

Language and Literacy

1. The correct answer is (A). Although all answers describe an aspect of literary structure, only (A), plot sequence, refers to the progression of events in a story, which would be indicated on the cards depicting the beginning, middle, and ending of the story. The activity does not focus on choice (B), a reflection of the opinion of an individual; choice (C), how a character changes in the course of a story; or choice (D), the location in which a story takes place.

2. The correct answer is (C). Guided reading is one component of a four-block reading program and consists of self-selected reading, shared reading, writing, and working with words. Direct instruction, (A), is a highly organized, teacher-directed approach in which the teacher uses articulated lessons where cognitive skills are broken down into small units, sequenced deliberately, and taught explicitly. A literature circle, (B), is a student-centered reading activity in which each member of the group is assigned a role as the group discusses what they have read. A read-aloud, (D), involves the teacher reading the story and the students listening to the story.

3. The correct answer is (C). Comprehension is a strategic process by which readers construct meaning. Therefore, identifying the main idea is a critical component of this process. Choices (A), (B), and (D) are relevant to decoding printed material but not to comprehending text.

4. The correct answer is (C). The most appropriate focus for the 3-year-old students is expressing speech or verbal ideas in print, such as writing ideas on large chart paper. Choices (A), (B), and (D) are incorrect because these concepts are not appropriate for 3 year olds who are learning to understand the expression of speech in print.

5. The correct answer is (D). Phonemic awareness involves matching words or pictures with beginning sounds. Choice (A), phonics, involves understanding how letters combine to make sounds and words. Students are ready for phonics after they have acquired phonemic awareness. Vocabulary, (B), involves building students' receptive vocabulary and expressive vocabulary. Letter recognition, (C), involves students identifying letters regardless of the color or size of the letter or whether the letter is written in crayon or paper or modeled in plastic.

6. The correct answer is (D). Active listening entails an attitude of accepting another person. By letting the student know that his or her ideas or feelings are respected (D), the teacher demonstrates active listening. Choices (A), (B), and (C) send messages of evaluation, opinion, and advice, which negate the goal of active listening.

7. The correct answer is (B). Only (B), "said," is an example of an irregularly spelled word that cannot be sounded out using common phonetic patterns and relationships. Choices (A), (C), and (D) are incorrect: "flight," "things," and "lamp" follow regular, or expected, spelling patterns, so they can be decoded using sound-letter relationship knowledge and knowledge of common spelling patterns and word families.

8. The correct answer is (A). A simple sentence consists of an independent clause, so it has a subject ("The boy") and a verb ("quiet"). Choice (B), complex sentence, consists of a combination of an independent clause and a dependent clause; choice (C), compound sentence, consists of two or more simple sentences; and choice (D), compound-complex sentence, consists of a combination of a compound sentence and a complex sentence.

9. The correct answer is (B). Brainstorming is the first step of prewriting, the planning phase of the writing process, which also includes researching and outlining ideas. During the drafting stage (A), students begin to put their ideas in paragraph form and develop the topic, while publishing (C) is the stage at which students share their final writing with others. Choice (D), editing, requires students to proofread and correct errors in their writing.

Mathematics

10. The correct answer is (D). The activity shows students decomposing their numbers into units, tens, and hundreds. Choice (A), comparing quantities, is incorrect because each student has only one number to work with. Choice (B), describing quantities, refers to providing more information such as whether the numbers are even or odd or multiples of other numbers. Choice (C), ordering quantities, is incorrect because the students are working with only one number.

11. The correct answer is (B). The answer 8 is found by subtracting 7 from 15.

12. The correct answer is (D). To determine whether the two numbers are equal, students need to compare the number of red apples to the number of yellow apples. Choices (A), (B), and (C) are incorrect because they involve counting, spatial awareness, and classifying, respectively.

13. The correct answer is (A). The recognition of a geometric shape's attributes is necessary for categorization. A child may be able to sequence numbers (B), count sets of objects (C), or match values with their numerical representations (D) without relating the attributes of objects to one another, as is necessary in categorizing.

14. The correct answer is (D). The activity best reinforces data collection, organization, and display. The students are collecting data by selecting one of three colored sticky notes each. With the teacher's help, the students organize the data on the chart. Pattern recognition (A) is incorrect because the activity does not require students to identify patterns. Conservation of numbers (B) is incorrect because a young child with an understanding of conservation will recognize that a quantity does not change even if the physical rearrangement changes. Choice (C) is incorrect because a concept of chance is the likelihood of occurrence or probability, which is not the focus of the activity described.

15. The correct answer is (B). The teacher is reinforcing the mathematical concept of counting. For example, in the morning, the students would need to count how many students are absent, based on the number of empty seats. Students classify (A) objects by a general attribute, such as shape, size, color, or type of material. Students can create patterns with colored beads (C). Students learn to order (D) based on concepts such as length and more than or less than.

16. The correct answer is (B). Standard units of measurement are universally available and are the same size in all contexts, while nonstandard units are invented measures that are not included as accepted standards of measurement (for example, pencils, a shoe, or cubes). Choice (A) is incorrect because it does not involve any measurement but requires students to stand in order of height. Choices (C) and (D) are incorrect because they involve standard units of measurement.

17. The correct answer is (C). By asking the students to select identical, equal-sized pieces such as $\frac{1}{4}$ that when used together can represent the fraction $\frac{1}{2}$, the students learn about the concept of equivalent fractions. The activity in the scenario does not support ordering unit fractions (A), adding rational numbers (B), or converting fractions to percents (D).

Social Studies

18. The correct answer is (B). Roles are the culturally defined norms for proper behaviors associated with every status in a society. Choice (A) is not correct because influence is not derived from expectations but from the ability of a person to affect other people or groups. Choice (C) is not correct because laws are guidelines for behavior regardless of status or role. Choice (D) is not correct because ethos refers to the ideas and beliefs of a particular racial or cultural group.

19. The correct answer is (C). The map shows that the greatest amount of precipitation (1,500 millimeters annually, on average) is in southeast China, compared with other areas that receive far less precipitation (less than 500 millimeters annually, on average). Choice (A) is incorrect because the south receives more precipitation than the north. Choice (B) is incorrect because the driest region is the west and not the northeast. Choice (D) is incorrect because the east receives more precipitation than the west.

20. The correct answer is (B). Creating a chart with students that focuses on similarities and not differences will make them aware of common interests they share. The activities in choices (A), (C), and (D) do not require students to discuss common interests.

21. The correct answer is (D). The strategy of partnering the student with a peer will help the child establish a friendship and identify himself as a member of a group. Choice (A) is incorrect because the strategy is best for comforting students when they are hurt or upset. Choice (B) is incorrect because the strategy is ideal for helping children express affection for significant adults. Choice (C) is incorrect because the strategy is best for helping children notice and show concern for peers' feelings.

Science

22. The correct answer is (C). A chemical change occurs when a new substance is formed from one or more other substances. Choices (A), (B), and (D) are examples of physical change.

23. The correct answer is (B). One characteristic of all living things is the ability to detect stimuli and changes in the environment and to respond to those changes. While some organisms have the ability to move (A), produce sugars by photosynthesis (C), and produce heat (D), others do not.

24. The correct answer is (B). The activity concretely illustrates the pathway of plant water transportation up the celery stalk. Choice (A) does not clearly illustrate how a plant transports water, while choices (C) and (D) may serve to model that plants use water but not how plants transport water.

25. The correct answer is (C). Water plays a major role in the processes of weathering and erosion. Moving water displaces rock particles and other substances from their original locations and transports them to other locations, resulting in the gradual shaping of Earth's surface. Although the agents given in choices (A), (B), and (D) do influence and change the appearance of Earth's surface, they do not typically shape Earth's surface by gradually moving bits of rock, soil, and other substances from one location to another.

Health and Physical Education, Creative and Performing Arts

26. The correct answer is (C). Losing the curl is characteristic of early stages of performing the forward roll. Choices (A), (B), and (D) are all characteristics of intermediate or advanced levels of performing the forward roll.

27. The correct answer is (B). Red, yellow, and blue are primary colors. These are the primary colors because all other colors are derived from these three colors. Secondary colors (C) include green, orange, and purple. These colors are formed by mixing the primary colors. Tertiary colors (D) include yellow-orange, red-orange, red-purple, blue-purple, blue-green, and yellow-green. These colors are formed by mixing a primary and secondary color. Complementary colors (A) are two colors that are opposite each other on the color wheel.

28. The correct answer is (C). The technique of correct toothbrushing is a basic and developmentally appropriate topic. The topics described in choices (A), (B), and (D) are too advanced for a child this age to understand.

29. The correct answer is (C). Tempo describes the rate of speed or pace of a piece of music. Dynamics (A) is its degree of softness or loudness. Pitch (B) is its highness or lowness. Harmony (D) is the simultaneous combination of notes.

30. The correct answer is (A). Skipping is a combination of a step and a hop on the same foot followed immediately by a step and hop on the opposite foot. The skills mentioned in choices (B), (C), and (D) are not required for learning to skip.

4. Determine Your Strategy for Success

Set clear goals and deadlines so your test preparation is focused and efficient

Effective *Praxis* test preparation doesn't just happen. You'll want to set clear goals and deadlines for yourself along the way. Otherwise, you may not feel ready and confident on test day.

1) Learn what the test covers.

You may have heard that there are several different versions of the same test. It's true. You may take one version of the test and your friend may take a different version a few months later. Each test has different questions covering the same subject area, but both versions of the test measure the same skills and content knowledge.

You'll find specific information on the test you're taking on page 5, which outlines the content categories that the test measures and what percentage of the test covers each topic. Visit www.ets.org/praxis/testprep for information on other *Praxis* tests.

2) Assess how well you know the content.

Research shows that test takers tend to overestimate their preparedness—this is why some test takers assume they did well and then find out they did not pass.

The *Praxis* tests are demanding enough to require serious review of likely content, and the longer you've been away from the content, the more preparation you will most likely need. If it has been longer than a few months since you've studied your content area, make a concerted effort to prepare.

3) Collect study materials.

Gathering and organizing your materials for review are critical steps in preparing for the *Praxis* tests. Consider the following reference sources as you plan your study:

- Did you take a course in which the content area was covered? If yes, do you still have your books or your notes?
- Does your local library have a high school-level textbook in this area? Does your college library have a good introductory college-level textbook in this area?

Practice materials are available for purchase for many *Praxis* tests at www.ets.org/praxis/testprep. Test preparation materials include sample questions and answers with explanations.

4) Plan and organize your time.

You can begin to plan and organize your time while you are still collecting materials. Allow yourself plenty of review time to avoid cramming new material at the end. Here are a few tips:

- Choose a test date far enough in the future to leave you plenty of preparation time. Test dates can be found at www.ets.org/praxis/register/centers_dates.
- Work backward from that date to figure out how much time you will need for review.
- Set a realistic schedule—and stick to it.

5) Practice explaining the key concepts.

Praxis tests with constructed-response questions assess your ability to explain material effectively. As a teacher, you'll need to be able to explain concepts and processes to students in a clear, understandable way. What are the major concepts you will be required to teach? Can you explain them in your own words accurately, completely, and clearly? Practice explaining these concepts to test your ability to effectively explain what you know.

6) Understand how questions will be scored.

Scoring information can be found on page 51.

7) Develop a study plan.

A study plan provides a road map to prepare for the *Praxis* tests. It can help you understand what skills and knowledge are covered on the test and where to focus your attention. Use the study plan template on page 32 to organize your efforts.

And most important—get started!

Would a Study Group Work for You?

Using this guide as part of a study group

People who have a lot of studying to do sometimes find it helpful to form a study group with others who are working toward the same goal. Study groups give members opportunities to ask questions and get detailed answers. In a group, some members usually have a better understanding of certain topics, while others in the group may be better at other topics. As members take turns explaining concepts to one another, everyone builds self-confidence.

If the group encounters a question that none of the members can answer well, the group can go to a teacher or other expert and get answers efficiently. Because study groups schedule regular meetings, members study in a more disciplined fashion. They also gain emotional support. The group should be large enough so that multiple people can contribute different kinds of knowledge, but small enough so that it stays focused. Often, three to six members is a good size.

Here are some ways to use this guide as part of a study group:

- **Plan the group's study program.** Parts of the study plan template, beginning on page 32, can help to structure your group's study program. By filling out the first five columns and sharing the worksheets, everyone will learn more about your group's mix of abilities and about the resources, such as textbooks, that members can share with the group. In the sixth column ("Dates I will study the content"), you can create an overall schedule for your group's study program.
- **Plan individual group sessions.** At the end of each session, the group should decide what specific topics will be covered at the next meeting and who will present each topic. Use the topic headings and subheadings in the Test at a Glance table on page 5 to select topics, and then select practice questions, beginning on page 18.
- **Prepare your presentation for the group.** When it's your to turn present, prepare something that is more than a lecture. Write two or three original questions to pose to the group. Practicing writing actual questions can help you better understand the topics covered on the test as well as the types of questions you will encounter on the test. It will also give other members of the group extra practice at answering questions.

- **Take a practice test together.** The idea of a practice test is to simulate an actual administration of the test, so scheduling a test session with the group will add to the realism and may also help boost everyone's confidence. Remember, complete the practice test using only the time that will be allotted for that test on your administration day.
- **Learn from the results of the practice test.** Review the results of the practice test, including the number of questions answered correctly in each content category. For tests that contain constructed-response questions, look at the Sample Test Questions section, which also contain sample responses to those questions and shows how they were scored. Then try to follow the same guidelines that the test scorers use.
- **Be as critical as you can.** You're not doing your study partner(s) any favors by letting them get away with an answer that does not cover all parts of the question adequately.
- **Be specific.** Write comments that are as detailed as the comments about the sample responses. Indicate where and how your study partner(s) are doing an inadequate job of answering the question. Writing notes in the margins of the answer sheet may also help.
- **Be supportive.** Include comments that point out what your study partner(s) got right.

Then plan one or more study sessions based on aspects of the questions on which group members performed poorly. For example, each group member might be responsible for rewriting one paragraph of a response in which someone else did an inadequate job.

Whether you decide to study alone or with a group, remember that the best way to prepare is to have an organized plan. The plan should set goals based on specific topics and skills that you need to learn, and it should commit you to a realistic set of deadlines for meeting those goals. Then you need to discipline yourself to stick with your plan and accomplish your goals on schedule.

5. Develop Your Study Plan

Develop a personalized study plan and schedule

Planning your study time is important because it will help ensure that you review all content areas covered on the test. Use the sample study plan below as a guide. It shows a plan for the *Core Academic Skills for Educators: Reading* test. Following that is a study plan template that you can fill out to create your own plan. Use the "Learn about Your Test" and "Test Specifications" information beginning on page 5 to help complete it.

Use this worksheet to:
1. **Define Content Areas:** List the most important content areas for your test as defined in chapter 1.
2. **Determine Strengths and Weaknesses:** Identify your strengths and weaknesses in each content area.
3. **Identify Resources:** Identify the books, courses, and other resources you plan to use for each content area.
4. **Study:** Create and commit to a schedule that provides for regular study periods.

Praxis Test Name (Test Code): Core Academic Skills for Educators: Reading (5712)
Test Date: 9/15/17

Content covered	Description of content	How well do I know the content? (scale 1–5)	What resources do I have/need for the content?	Where can I find the resources I need?	Dates I will study the content	Date completed
Key Ideas and Details						
Close reading	Draw inferences and implications from the directly stated content of a reading selection	3	Middle school English textbook	College library, middle school teacher	7/15/17	7/15/17
Determining Ideas	Identify summaries or paraphrases of the main idea or primary purpose of a reading selection	3	Middle school English textbook	College library, middle school teacher	7/17/17	7/17/17
Determining Ideas	Identify summaries or paraphrases of the supporting ideas and specific details in a reading selection	3	Middle and high school English textbook	College library, middle and high school teachers	7/20/17	7/21/17
Craft, Structure, and Language Skills						
Interpreting tone	Determine the author's attitude toward material discussed in a reading selection	4	Middle and high school English textbook	College library, middle and high school teachers	7/25/17	7/26/17
Analysis of structure	Identify key transition words and phrases in a reading selection and how they are used	3	Middle and high school English textbook, dictionary	College library, middle and high school teachers	7/25/17	7/27/17
Analysis of structure	Identify how a reading selection is organized in terms of cause/effect, compare/contrast, problem/solution, etc.	5	High school textbook, college course notes	College library, course notes, high school teacher, college professor	8/1/17	8/1/17
Author's purpose	Determine the role that an idea, reference, or piece of information plays in an author's discussion or argument	5	High school textbook, college course notes	College library, course notes, high school teacher, college professor	8/1/17	8/1/17

(continued on next page)

Content covered	Description of content	How well do I know the content? (scale 1–5)	What resources do I have/need for the content?	Where can I find the resources I need?	Dates I will study the content	Date completed
Language in different contexts	Determine whether information presented in a reading selection is presented as fact or opinion	4	High school textbook, college course notes	College library, course notes, high school teacher, college professor	8/1/17	8/1/17
Contextual meaning	Identify the meanings of words as they are used in the context of a reading selection	2	High school textbook, college course notes	College library, course notes, high school teacher, college professor	8/1/17	8/1/17
Figurative Language	Understand figurative language and nuances in word meanings	2	High school textbook, college course notes	College library, course notes, high school teacher, college professor	8/8/17	8/8/17
Vocabulary range	Understand a range of words and phrases sufficient for reading at the college and career readiness level	2	High school textbook, college course notes	College library, course notes, high school teacher, college professor	8/17/17	8/17/17
Integration of Knowledge and Ideas						
Diverse media and formats	Analyze content presented in diverse media and formats, including visually and quantitatively, as well as in words	2	High school textbook, college course notes	College library, course notes, high school teacher, college professor	8/22/17	8/24/17
Evaluation of arguments	Identify the relationship among ideas presented in a reading selection	4	High school textbook, college course notes	College library, course notes, high school teacher, college professor	8/24/17	8/24/17
Evaluation of arguments	Determine whether evidence strengthens, weakens, or is relevant to the arguments in a reading selection	3	High school textbook, college course notes	College library, course notes, high school teacher, college professor	8/27/17	8/27/17
Evaluation of arguments	Determine the logical assumptions upon which an argument or conclusion is based	5	High school textbook, college course notes	College library, course notes, high school teacher, college professor	8/28/17	8/30/17
Evaluation of arguments	Draw conclusions from material presented in a reading selection	5	High school textbook, college course notes	College library, course notes, high school teacher, college professor	8/30/17	8/31/17
Comparison of texts	Recognize or predict ideas or situations that are extensions of or similar to what has been presented in a reading selection	4	High school textbook, college course notes	College library, course notes, high school teacher, college professor	9/3/17	9/4/17
Comparison of texts	Apply ideas presented in a reading selection to other situations	2	High school textbook, college course notes	College library, course notes, high school teacher, college professor	9/5/17	9/6/17

My Study Plan

Use this worksheet to:

1. **Define Content Areas:** List the most important content areas for your test as defined in chapter 1.
2. **Determine Strengths and Weaknesses:** Identify your strengths and weaknesses in each content area.
3. **Identify Resources:** Identify the books, courses, and other resources you plan to use for each content area.
4. **Study:** Create and commit to a schedule that provides for regular study periods.

Praxis Test Name (Test Code): _____

Test Date: _____

Content covered	Description of content	How well do I know the content? (scale 1–5)	What resources do I have/need for this content?	Where can I find the resources I need?	Dates I will study this content	Date completed

(continued on next page)

Content covered	Description of content	How well do I know the content? (scale 1–5)	What resources do I have/need for the content?	Where can I find the resources I need?	Dates I will study the content	Date completed

6. Review Study Topics

Detailed study topics with questions for discussion

Using the Study Topics That Follow

The Early Childhood Education test is designed to measure the knowledge and skills necessary for a beginning teacher.

This chapter is intended to help you organize your preparation for the test and to give you a clear indication of the depth and breadth of the knowledge required for success on the test.

Virtually all accredited programs address the topics covered by the test; however, you are not expected to be an expert on all aspects of the topics that follow.

You are likely to find that the topics below are covered by most introductory textbooks. Consult materials and resources, including lecture and laboratory notes, from all your coursework. You should be able to match up specific topics and subtopics with what you have covered in your courses.

Try not to be overwhelmed by the volume and scope of content knowledge in this guide. Although a specific term may not seem familiar as you see it here, you might find you can understand it when applied to a real-life situation. Many of the items on the actual test will provide you with a context to apply to these topics or terms.

Discussion Areas

Interspersed throughout the study topics are discussion areas, presented as open-ended questions or statements. These discussion areas are intended to help test your knowledge of fundamental concepts and your ability to apply those concepts to situations in the classroom or the real world. Most of the areas require you to combine several pieces of knowledge to formulate an integrated understanding and response. If you spend time on these areas, you will gain increased understanding and facility with the subject matter covered on the test. You may want to discuss these areas and your answers with a teacher or mentor.

Note that this study companion *does **not** provide answers for the discussion area questions*, but thinking about the answers to them will help improve your understanding of fundamental concepts and will probably help you answer a broad range of questions on the test.

Study Topics

An overview of the areas covered on the test, along with their subareas, follows.

I. Language and Literacy

Demonstrates understanding of central concepts, skills, and tools of inquiry in language and literacy; applies that knowledge in the context of children's learning; demonstrates understanding of the structure of the content area of language and literacy; demonstrates understanding of ways in which language and literacy are integrated across content areas; demonstrates understanding of ways to make real-life connections to language and literacy.

A. Emergent Literacy: Foundational Skills

1. Recognizes various stages of language acquisition (e.g., oral language, written language -- including spelling)
2. Differentiates approaches in the planning and implementation of instruction for all students with diverse needs, including English-language learners (ELLs), students with special needs, and gifted and talented students
3. Knows how to help students develop an understanding of print awareness (e.g., environmental print, print concepts)
4. Understands the role of phonological awareness in literacy development
    a. explains the importance of phonological awareness as a foundational skill for literacy development
    b. identifies and provides examples of phonemes, syllables, onsets, and rimes
    c. identifies and provides examples of blending, segmenting, substituting, and deleting phonemes

B. Reading: Foundational Skills

1. Understands the role and importance of phonics and word analysis in literacy development
    a. knows common letter-sound correspondences and syllabication patterns (e.g., CVC, VC, CV)
    b. knows spelling conventions (e.g., irregularly spelled words, homonyms, homophones)
    c. distinguishes high-frequency sight words from decodable words appropriate for particular grades
    d. identifies roots and affixes to decode unfamiliar words
2. Understands the role of fluency in literacy development
    a. defines fluency and related terms (e.g., accuracy, rate, prosody)
    b. explains the impact of fluency on comprehension

C. Reading: Literature and Informational Text

1. Understands how to use key ideas and details to comprehend literature, informational text, and images
    a. identifies the key details, moral, and/or theme of a literary text, citing specific textual evidence
    b. identifies the key details and/or central idea of an informational text, citing specific textual evidence
    c. makes inferences from a text and supports them with appropriate evidence
    d. summarizes information from a text
    e. analyzes the characters, setting, sequencing, and plot of a literary text
    f. analyzes the relationships among individuals, events, ideas, and concepts in an informational text
2. Understands how features and structures of text across genres affect comprehension
    a. identifies structural elements of literature across genres (e.g., casts of characters and stage directions in drama, rhyme and meter in poetry)
    b. uses text features (e.g., sidebars, hyperlinks, images) to locate information in a print or digital informational text
    c. identifies organizational structures of informational (e.g., cause/effect, problem/solution, comparison) and literary text (e.g., exposition, rising action, climax, resolution)
    d. identifies how structural elements (e.g., header, graphs, images) contribute to the development of informational and literary text

3. Understands the concept of point of view using evidence from the text
   a. identifies author's point of view in various genres and supports conclusions with evidence from the text
   b. compares multiple points of view about the same event or topic
   c. identifies how point of view affects the overall structure of a literary or informational text
4. Understands how to integrate and compare written, visual, and oral information from texts and multimedia sources
   a. explains how visual and oral elements enhance the meaning and effect of a literary text (e.g., picture book, graphic novel, multimedia presentation)
   b. compares the written version of a literary text with an oral, staged, or digital version
   c. compares two or more texts (literary and/or informational) that address the same theme or topic
   d. interprets visual and multimedia elements in literary and informational texts
5. Knows the role of text complexity in reading development
   a. explains the factors that contribute to text complexity (e.g., vocabulary, sentence complexity, images)
   b. identifies and uses multiple text-leveling systems
   c. selects appropriate texts for readers at various levels

D. Writing

1. Knows the developmental stages of writing
   a. identifies a developmentally appropriate continuum of writing (e.g., drawing, scribbling, combining strings of letters)
   b. recognizes strategies to support the development of emergent writing (e.g., copying print, understanding how print conveys a message)
   c. identifies a developmentally appropriate continuum of spelling
2. Understands the characteristics of common types of writing
   a. distinguishes among common types of writing (e.g., opinion/argument, informative/explanatory, narrative)
   b. identifies the purpose, key components, and subgenres (e.g., advertisements, recipes, narrative poems) of each common type of writing
   c. evaluates the effectiveness of writing samples of each type
3. Understands the authoring cycle of writing
   a. identifies steps of the authoring cycle (e.g. brainstorming, outlining, publishing)
   b. identifies the interrelationships among planning, revising, and editing in the process of writing
4. Understands the characteristics of effective writing
   a. evaluates the appropriateness of a particular piece of writing for a specific task, purpose, or audience
   b. evaluates the development, organization, or style of a piece of writing
   c. identifies appropriate revisions to strengthen a sample of writing
   d. recognizes writing that is clear and coherent and understands its elements (e.g. support, conclusion, sequence)
5. Knows the purpose of digital media literacy for production and distribution of writing
   a. identifies the characteristics and purposes of a variety of digital tools for producing and publishing writing
   b. selects the appropriate digital tools for a specific purpose and audience
6. Knows the research process that builds knowledge about a topic
   a. identifies the steps in the research process
   b. distinguishes between primary and secondary sources and their uses
   c. distinguishes between paraphrasing and plagiarizing
   d. knows how to locate credible print and digital sources, locate information within the sources, and cite the sources

E. Speaking and Listening

1. Knows the characteristics of effective collaborative conversations
    a. identifies techniques to communicate for a variety of purposes
    b. identifies the characteristics of active listening
    c. knows strategies for promoting conversations (e.g., types of questions, modeling metacognition, providing opportunities)
2. Knows the characteristics of engaging oral presentations
    a. identifies elements of engaging oral presentations (e.g., volume, articulation, awareness of audience, eye contact)
    b. differentiates between formal and informal language use (e.g., code switching)
    c. identifies the characteristics of being a respectful audience member

F. Language

1. Knows the conventions of Standard English grammar, usage, mechanics, and spelling.
    a. explains the function of different parts of speech and spelling
    b. corrects errors in usage, mechanics
    c. identifies examples of different sentence types (e.g., simple, compound, compound-complex)
    d. identifies how varieties of English (e.g., dialects, registers) used in stories, dramas, or poems support the overall meaning
2. Understands how to determine the meaning of words and phrases
    a. determines the literal meaning of unknown words and phrases from context, syntax, and/or knowledge of roots and affixes
    b. identifies types of figurative language
    c. interprets figurative language
    d. analyzes the relationship between word choice and tone in a text
    e. uses images and texts to determine the meaning of unknown words and phrases
3. Understands characteristics of conversational, academic, and domain-specific language
    a. differentiates among tiered vocabulary (e.g., common words, multiple meaning words, content-specific words)
    b. identifies relevant features of language such as word choice, word order, and punctuation

Discussion areas: Language and Literacy

- What would be the best way to encourage children to play with words?
- How could you incorporate language games to teach children to recognize words that sound the same and/or different?
- Before explicit instruction in phonological awareness begins, English-language learners should have extensive experiences with fun and appealing songs, poems, chants, and read-alouds that will allow them to hear and reproduce the sound patterns of English. How could you create a language-rich environment?
- How would you help the children make the transition from nonverbal communication to using a few words?
- Children at the alphabet awareness stage will recognize the letters in their name and a few other letters, can say or sing the alphabet, will recognize print in the local environment, have some knowledge of the purpose of print, can write their name, and will pretend to read a familiar book. What activities could you incorporate on a daily basis to reinforce the children's ability to recognize that a variety of print letter formations and text forms are used for different functions?
- In Vera B. Williams' *A Chair for My Mother*, Rosa and her family save all their pennies to buy a new chair for her mother, after a fire destroys everything they own. To achieve fluency, Williams varies the structure and length of the sentences. What kind of activities will allow the students to dissect her sentences and form their own?

- This book also allows children the opportunity to discuss the ways they could help someone who experiences this kind of loss. How can you make the book relate to the notion of community service and volunteerism?
- In kindergarten, children show an understanding of story structure by verbally identifying the main character, setting, and important events in a story read aloud. How do children demonstrate the same understanding of story structure by Grade 2?
- How important is creative drama for understanding plots and themes?
- Young children love to use pencils, pens, and crayons to imitate adult writing. Writing at this stage may look more like scribbling; you should recognize that it takes on a definite form and it gradually transforms into little marks. Are they scribbling with a purpose?
- How do you encourage children to notice the shapes of words?
- Consider how to include print in classroom activities and experiences by designating a word wall in the classroom. This is a space for high-frequency words that the children update regularly. This wall may contain sight words that the children are learning for reading or basic words that they need for their writing. How could this word wall be used to promote children's interests and goals for reading and writing?
- When children write, they construct works while composing and then writing. When children read, they take the words apart. How could you best provide the opportunities to allow the children to coordinate and use both processes?
- How can you use journal writing to give children a chance to experiment with some of the skills they've been learning?
- What activities will allow children to continue to build their writing skills at home?

II. Mathematics

Demonstrates understanding of central concepts, skills, and tools of inquiry in mathematics; applies that knowledge in the context of children's learning; demonstrates understanding of the structure of the content area of mathematics; demonstrates understanding of a variety of strategies to determine the reasonableness of results; demonstrates understanding of ways in which mathematics is integrated across the content areas; demonstrates understanding of ways to make real-life connections to mathematics

Note: Mathematics questions on the test assess test takers' understanding of fundamental mathematical skills and concepts central to the early childhood and early elementary curriculum, as described in the topic list below. Most questions are posed in the context of children's learning; few questions present purely computational mathematics problems.

A. Emergent Mathematics: Foundational Skills

1. Understands the prerequisite skills that relate to future mathematical concept development including but not limited to the following.
   a. recognizes patterns
   b. uses one-to-one correspondence
   c. uses grouping and classification by one or more attributes
   d. uses subitizing (instantly recognizing how many)
   e. uses sequencing and conservation of number
   f. uses simple directions related to position and proximity
   g. represents numbers in multiple ways
   h. uses counting and cardinality principles

B. Numbers and Operations—Whole Numbers

1. Understands the processes, skills, and concepts related to the place-value system
   a. compares and orders whole numbers
   b. composes and decomposes multi-digit numbers
   c. given a digit, identifies the place the digit is in and its value in that place

d. recognizes that a digit in one place represents ten times what it represents in the place to its right and one-tenth what it represents in the place to its left

e. rounds multi-digit numbers to any place value

f. represents numbers in expanded form

2. Knows how to apply appropriate mental strategies
   a. recognizes patterns, math facts, composition and decomposition of numbers, and compensation as mental strategies
   b. selects and utilizes appropriate strategies
3. Understands processes, skills, and concepts related to operations and properties of operations involving whole numbers
   a. uses understanding of place-value and properties of operations to add, subtract, multiply, and divide
   b. uses concrete models, drawings, and number lines to illustrate, interpret, and explain addition, subtraction, multiplication, and division of whole numbers, including multi-digit numbers
   c. illustrates and explains multiplication and division problems using equations, rectangular arrays, area models, and partitioning
   d. uses various strategies and algorithms to perform operations on whole numbers, including multi-digit numbers, and interprets the remainder in division problems
   e. uses the four operations (addition, subtraction, multiplication, and division) to solve multistep mathematical and real-life problems involving whole numbers and determines whether answers are reasonable
   f. identifies different problem situations (e.g., adding to, taking away from, comparing)
   g. uses the relationship between operations to solve problems (e.g., inverse operations, repeated addition, repeated subtraction)

C. Numbers and Operations—Fractions

1. Understands the multiple representations and meanings of a fraction
   a. converts fractions to decimals and percents
   b. recognizes that a fraction represents a division problem, ratio, or remainder
2. Understands the processes, skills, and concepts for working with rational fractions
   a. represents fractions using visual fraction models, sets of objects, grids, area models, and number lines
   b. composes and decomposes fractions and understands the use of unit fractions
   c. recognizes that the value of a unit fraction decreases as the value of the denominator increases
   d. writes and uses equivalent fractions to compare fractions
   e. explains why the same whole must be used when comparing fractions
   f. recognizes that when the numerator and denominator are the same number, the fraction is equal to one
   g. recognizes that any whole number can be written as itself over on

D. Algebraic Thinking

1. Knows the processes, skills, and concepts for working with patterns
   a. identifies, extends, describes, or generates number, shape, and other repeating patterns
   b. makes conjectures, predictions, or generalizations based on patterns
2. Knows the properties of the four operations and the processes, skills, and concepts for solving problems
   a. identifies arithmetic patterns (including patterns in the addition table and in the multiplication table) and explains the patterns using properties of operations
   b. applies properties of operations (i.e., commutative, associative, distributive) and uses them as strategies to add, subtract, multiply, and divide
   c. uses the order of operations to solve multistep problems

d. represents and solves word problems involving the four operations using equations with a variable representing the unknown in any position

E. Geometry, Measurement, and Data

1. Understands the processes, skills, and concepts for reasoning about shapes and their attributes
   a. classifies and compares shapes according to their attributes
   b. composes and decomposes two- and three-dimensional shapes
   c. partitions shapes into parts with equal areas and describes the area of each part as a fraction of the entire area of the shape
2. Understands the processes, skills, and concepts for solving problems involving measurement and estimation using standard and nonstandard units of measure
   a. solves problems involving elapsed time, money, length, volume, and mass
   b. solves mathematical and real-life problems involving perimeter and area of polygons
   c. relates the concept of area to the operations of multiplication and addition
   d. uses relative sizes of United States customary units and metric units
3. Understands the processes, skills, and concepts for representing and interpreting data
   a. collects, organizes, and represents data
   b. interprets data presented in various formats (e.g., picture graph, bar graph, line plot)

Discussion areas: Mathematics

- To effectively utilize mathematical thinking skills, it is important to have a conceptual understanding of key ideas, along with knowledge of the procedural skills required What key ideas are essential for problem-solving, reasoning, communicating, connection-making and representation?
- What procedural skills are necessary when applying mathematical thinking skills?
- What are the purposes of a mathematics center and what kind of activities and materials can you include in a mathematics center?
- What are trade books? Can you identify trade books that you can use to introduce students to specific mathematics concepts? How would you use the books?
- What is required for a child to have an understanding of numbers and operations and what is the appropriate progression for introducing new skills and concepts at the early childhood and early elementary level? Consider your response in relation to number names, counting, comparing and ordering numbers, place value to thousands, composing and deposing numbers (addition and subtraction in base ten), and multiplication and division.
- What activity on patterns and relationships would be appropriate for early childhood and early elementary students?
- How do patterns and relationships offer a foundation for understanding not only algebraic reasoning but also for mathematics in general?
- What are the names and specific attributes of two- and three-dimensional shapes? Analyze and compare a variety of two- and three-dimensional shapes in different sizes and orientations. Compose (join together) shapes to form a larger unit and decompose (take apart) a shape to form a collection of smaller shapes. Identify objects in the environment that have specific two- and three-dimensional shapes.
- What measurement units, systems, processes, techniques, tools and formulas are appropriate for early childhood students?
- How is measurement information best conveyed for student understanding? Consider all areas of measurement, including length measurement, time and money.
- What kinds of data are appropriate for students to collect?
- How might they organize and display their data?
- What kinds of information might they find in their data?
- What is the difference between an observation and an inference?
- What is the difference between a prediction and a fact?

III. Social Studies

Demonstrates understanding of central concepts, skills, and tools of inquiry in the social sciences; applies that knowledge in the context of young children's learning and social and emotional development; demonstrates understanding of the structure of the content areas of social studies; demonstrates understanding of ways in which social studies and social skills are integrated across the content areas; demonstrates understanding of ways to make real-life connections to social studies

A. Identity, Social, and Emotional Development

1. Understands the process of exploring, identifying, and analyzing identity, individual development, and relationships to others (e.g., self-concept, self-awareness, and self-regulation and how they develop)
   a. understands interpersonal relationships (e.g., norms of social behavior)
   b. selects appropriate tools for teaching group social skills (e.g., conflict resolution)
   c. understands the influence of family, community, and social systems (e.g., the ways in which social systems influence daily life and personal choices)
   d. understands how institutions (e.g., religious, academic, government) influence individual identity, relationships, beliefs, and behaviors
   e. understands how to promote emotional development and regulation

B. Culture and Cultural Identity

1. Knows the components of culture and why the study of culture is important
   a. knows ways in which families, groups, societies, and cultures address similar human wants, needs, and concerns
   b. knows ways in which cultural perspectives shape experiences and perceptions
   c. understands the influence of language, literature, music, and artistic creations as expressions of culture and people
   d. knows ways in which people from different cultures perceive and interact with the physical environment and social conditions
   e. understands the concepts of unity and diversity within and across groups
   f. understands the concepts of interdependence and intradependence between and among cultural groups

C. People, Places, and Environments

1. Understands spatial thinking, geographic perspectives, and the relationship between human beings and their environment
   a. understands geographic concepts (e.g., region, measurement, directional terms, landmarks, distance, location)
   b. understands geographic literacy skills (e.g., the construction and use of maps, graphs, charts, and technology)
   c. knows the physical and human-made characteristics of different places and how they affect human behavior and experience (e.g., rain forest, desert, urban and rural communities)
   d. understands the interdependence of living things, the environment, and the economy

D. Time, Continuity, and Change

1. Knows ways in which human beings seek to understand their historical roots and to locate themselves in time
   a. understands chronological thinking skills
   b. knows how to analyze historical data (e.g., time lines, maps, graphs, and tables)

E. Civics and Government

1. Understands the importance of civic participation and how people create and change structures of power, authority, and governance
   a. understands key civics concepts (e.g., human dignity, justice, equality, equity, tolerance, rule of law, citizenship)
   b. understands civic participation in the context of classroom, community, nation, and world (e.g., raising an issue, making an informed decision, considering other perspectives, balancing individual and group needs)

Discussion areas: Social Studies

- What attitudes, values, and ideas about others do children bring to the classroom? How do children learn about others?
- What concepts are key to teaching children to celebrate diversity?

- Why should the teacher focus on similarities rather than differences?
- What do all people share in common?
- How can you best use technology to show children that their own art forms are both similar to and different from art forms in other countries?
- The most effective resources available for children's development of international concepts are the children themselves. How can you build upon that vase of heritage and backgrounds?
- What is geography and what concepts are considered key to the study of geography?
- How do children develop concepts of direction and location, and how can you foster their understanding of these concepts?
- What is the integrative power of the field trip?
- **Exercise:**

  THE END

  By A.A. Milne

  When I was One,
  I had just begun.

  When I was Two,
  I was nearly new.

  When I was Three,
  I was hardly me.

  When I was Four,
  I was not much more.

  When I was Five,
  I was just alive.

  But now I am six,
  I'm as clever as clever

  So I think I'll be six now
  Forever and ever.

  A study question about this topic may include: How could you use the poem above to initiate a discussion of how the students perceive the future?

IV. Science

Demonstrates understanding of central concepts, skills, and tools of inquiry in science; applies that knowledge in the context of children's learning; demonstrates understanding of the structure of the content area of science; demonstrates understanding of ways in which science is integrated across the content areas demonstrates understanding of ways to make real-life connections to science

A. Fundamental Concepts and Processes of Scientific Inquiry

1. Understands fundamental concepts and processes of scientific inquiry across and within the various scientific disciplines of physical science, Earth and space science, life science, and engineering and technology
   a. knows unifying science concepts (e.g., systems, cycles, constancy, and change)
   b. understands the scientific process (e.g., formulating questions, testing hypotheses, and communicating information to help explain the world)
   c. understands basic science skills (e.g., observing, describing, and classifying; making inferences; communicating and representing findings; using simple tools; collecting and analyzing data)

B. Physical Science

1. Understands the basic phenomena of the physical world
   a. understands the concept of properties of objects and materials (e.g., states of matter)
   b. knows the forms of energy, including light, heat, electricity, and magnetism, and their related concepts (e.g., reflection, and absorption of light; push and pull; production and conduction of heat)
   c. knows the concepts of position and motion of objects (e.g., the position and motion of an object can be changed by exerting force)

C. Earth and Space Science

1. Knows the basic phenomena of Earth and space
   a. knows objects seen in the sky and their properties, movements, and locations (e.g., Sun, Moon, stars)
   b. understands how changes that occur on Earth and in space (e.g., daily weather and daylight patterns, erosion) can affect seasonal and daily weather and daylight patterns
   c. understands the properties of Earth materials (e.g., different physical and chemical properties of Earth materials, including solid rocks and soils, fossils, water, and gases)

D. Life Science

1. Understands living organisms and natural systems
   a. understands the basic characteristics of organisms and their environments (e.g., basic needs and behaviors, structures that support growth, habitats)
   b. understands the life cycles of organisms including the inheritance of traits
   c. understands the interdependent relationships in ecosystems

E. Engineering, Technology and Applications of Science

1. Is familiar with methods of facilitating problem solving through inventing solutions to simple problems
   a. recognizes situations where change and improvement may be possible
   b. develops possible solutions to existing problems through sketches, drawings, and physical models
   c. compares and tests multiple solutions to determine the solution that best solves the problem
2. Knows appropriate technology to support scientific inquiry across domains

Discussion areas: Science

- The Discovery Area of your classroom gives children an opportunity to use their senses to touch, feel, taste, smell and see. They can act on objects and observe what happens next. How can you best use your Discovery Area to build children's vocabulary and language, strengthen their number concepts, develop measurement skills, and enhance geometry skills?
- How can you use your Discovery Area to teach children about people and how they live, as well as encourage children to explore the elements of the visual arts and how music is made?
- What is the importance of including activities such as outdoor exploration in a preschool schedule? What might you have a group of preschoolers do during outdoor exploration?
- How can you use trade books to foster students' development of specific science concepts?
- How might you help early elementary students understand science process and skills?
- What are some ways in which journals can help students learn science?
- What activity might you use to engage students in data collection and analysis?
- What is the "inquiry method" as it relates to science?
- Suppose you wanted to introduce lower-elementary students to the inquiry method. What activities might you employ?
- What activities might you use to help students understand science concepts such as states of matter, force and motion, and life cycle of organisms?
- What common misconceptions do you know that early-elementary learners are likely to have about science concepts and terms?
- How might you use drawings and models to facilitate students' problem solving skills?
- What tools and technology might you use to engage students in the process of scientific inquiry?

- In *Cloudy with a Chance of Meatballs* by Judi Barrett, the people in Chewandswallow never had to worry about buying or cooking food. It came down from the sky. After the "rain" became too much, the people of the town had to move to a new town. How can you use this book to teach the concepts of the influence of weather, weather predictions, and weather disasters?

V. Health and Physical Education, Creative and Performing Arts

A. Health and Physical Education

Demonstrates understanding of central concepts, skills, and tools of inquiry in health education, physical education; applies that knowledge in the context of children's learning; demonstrates understanding of the structure of the content areas of health and physical education; demonstrates understanding of ways in which health and physical education are integrated across the content areas; demonstrates understanding of ways to make real-life connections to health and physical education

1. Health
   a. Knows fundamental health concepts and skills
      - understands health promotion, wellness, and disease prevention
      - recognizes major risks to children's health and safety and the prevention of those risks
      - knows the basic structure and function of human-body systems and how they interrelate
      - understands how mental and emotional health factors have an effect on overall health (e.g., personal, family, communication, relationships)
      - knows how to access and use a variety of resources to help students cope with mental and emotional health needs (e.g., referrals to appropriate health care professionals, conflict resolution, decision making)
      - recognizes environmental, community, and consumer health issues affecting personal health (e.g., pollution, health care)
      - knows the harmful effects of alcohol, tobacco, and other drugs
      - knows the importance of maintaining a healthy and nutritious diet
      - knows the impact of health on learning and development across the content areas
2. Physical Education
   a. Knows fundamental physical education concepts and skills
      - understands motor development and motor learning, including typical and atypical developmental progression and activities that promote development (e.g., skill themes, movement concepts)
      - knows the components of health-related fitness (e.g., muscular strength and endurance, cardiovascular fitness, flexibility, body composition) and skill-related fitness (e.g., agility, balance, power, speed) and how to achieve and maintain physical fitness
      - knows the ways in which physical activity provides opportunities for learning, enjoyment, challenge, self-expression, and social interaction for participation in lifelong activities
      - knows the impact that physical activity and fitness have on learning and development across content areas

Discussion areas: Health and Physical Education

- Dr. Seuss books create a wealth of physical activity lessons: "Yertle the Turtle"—children crawl on mats like Yertle: "Go Dogs Go"—children ride scooters like the dogs in the story; "Hop on Pop"—children bounce on the trampoline; "The Cat in the Hat"—children weave through cones; and "The Foot Book"—children dribble balls with their feet. What other stories or books could you use to develop opportunities for learning and challenge?
- How might you help students develop skills and practices to keep them safe and healthy?

- How might you grade students with different skill and ability levels that are in the same grade?
- Imagine that you are planning to teach a health lesson on common health myths. What sources would provide the most reliable health information for students?
- How can you help students to demonstrate responsible personal and social behaviors in the school and community?
- What four skills would probably be required to teach a unit on soccer at the elementary school level? In what order should the skills be taught?

B. Creative and Performing Arts

Demonstrates a proficiency and understanding of core concepts, skills, and tools of inquiry in the creative and performing arts; applies that knowledge in the context of children's learning; demonstrates an understanding of the structure of the content areas of creative and performing arts; demonstrates an understanding of ways in which the arts are integrated across the content areas; demonstrates an understanding of ways to make real-life connections to creative and performing arts

1. Purposes and Functions of the Arts
   a. knows why works of art are created and the processes for responding to works of art
      – knows the purposes of visual and performing arts creation
      – knows the materials and processes used to respond to works of art
      – knows the interrelationships within the visual and performing art disciplines
      – knows the connections between the visual and performing arts across disciplines
2. Structure and Processes Within the Arts
   a. knows basic terminology, elements, principles, materials, and processes utilized in visual art, music, dance, and theater
      – knows the terminology, components, and elements of arts creation (e.g., color, line, shape, texture, harmony, melody, pitch, tempo)
      – knows the organizing principles of arts creation (e.g., rhythm, contrast, balance, unity, scale, movement, pattern)
      – knows the materials and processes used to create and perform works of art
      – knows the ways in which visual and performing arts activities create opportunities for appreciation, enjoyment, learning, self-expression, and social interaction
      – knows the ways in which artistic practice informs, enriches, and complements teaching and learning

Discussion areas: Creative and Performing Arts

- How can the arts foster learning experiences that hold the interest of children while encouraging problem solving?
- What can you do to use the arts to stimulate an understanding of other people's ways of living and culture?
- How can children learn about science through dramatic play?
- How might you teach a lesson on a stringed instrument if you cannot play it yourself?
- How might you teach the creative and performing arts without a budget?

7. Review Smart Tips for Success

Follow test-taking tips developed by experts

Learn from the experts. Take advantage of the following answers to questions you may have and practical tips to help you navigate the *Praxis* test and make the best use of your time.

Should I guess?

Yes. Your score is based on the number of questions you answer correctly, with no penalty or subtraction for an incorrect answer. When you don't know the answer to a question, try to eliminate any obviously wrong answers and then guess at the correct one. Try to pace yourself so that you have enough time to carefully consider every question.

Can I answer the questions in any order?

You can answer the questions in order or skip questions and come back to them later. If you skip a question, you can also mark it so that you can remember to return and answer it later. Remember that questions left unanswered are treated the same as questions answered incorrectly, so it is to your advantage to answer every question.

Are there trick questions on the test?

No. There are no hidden meanings or trick questions. All of the questions on the test ask about subject matter knowledge in a straightforward manner.

Are there answer patterns on the test?

No. You might have heard this myth: the answers on tests follow patterns. Another myth is that there will never be more than two questions in a row with the correct answer in the same position among the choices. Neither myth is true. Select the answer you think is correct based on your knowledge of the subject.

Can I write on the scratch paper I am given?

Yes. You can work out problems on the scratch paper, make notes to yourself, or write anything at all. Your scratch paper will be destroyed after you are finished with it, so use it in any way that is helpful to you. But make sure to select or enter your answers on the computer.

Smart Tips for Taking the Test

1. **Skip the questions you find extremely difficult.** Rather than trying to answer these on your first pass through the test, you may want to leave them blank and mark them so that you can return to them later. Pay attention to the time as you answer the rest of the questions on the test, and try to finish with 10 or 15 minutes remaining so that you can go back over the questions you left blank. Even if you don't know the answer the second time you read the questions, see if you can narrow down the possible answers, and then guess. Your score is based on the number of right answers, so it is to your advantage to answer every question.

2. **Keep track of the time.** The on-screen clock will tell you how much time you have left. You will probably have plenty of time to answer all of the questions, but if you find yourself becoming bogged down, you might decide to move on and come back to any unanswered questions later.

3. **Read all of the possible answers before selecting one.** For questions that require you to select more than one answer, or to make another kind of selection, consider the most likely answers given what the question is asking. Then reread the question to be sure the answer(s) you have given really answer the question. Remember, a question that contains a phrase such as "Which of the following does NOT …" is asking for the one answer that is NOT a correct statement or conclusion.

4. **Check your answers.** If you have extra time left over at the end of the test, look over each question and make sure that you have answered it as you intended. Many test takers make careless mistakes that they could have corrected if they had checked their answers.

5. **Don't worry about your score when you are taking the test.** No one is expected to answer all of the questions correctly. Your score on this test is not analogous to your score on the *GRE*® or other tests. It doesn't matter on the *Praxis* tests whether you score very high or barely pass. If you meet the minimum passing scores for your state and you meet the state's other requirements for obtaining a teaching license, you will receive a license. In other words, what matters is meeting the minimum passing score. You can find passing scores for all states that use the *Praxis* tests at http://www.ets.org/s/praxis/pdf/passing_scores.pdf or on the web site of the state for which you are seeking certification/licensure.

6. **Use your energy to take the test, not to get frustrated by it.** Getting frustrated only increases stress and decreases the likelihood that you will do your best. Highly qualified educators and test development professionals, all with backgrounds in teaching, worked diligently to make the test a fair and valid measure of your knowledge and skills. Your state painstakingly reviewed the test before adopting it as a licensure requirement. The best thing to do is concentrate on answering the questions.

8. Check on Testing Accommodations

See if you qualify for accommodations that may make it easier to take the Praxis *test*

What if English is not my primary language?

Praxis tests are given only in English. If your primary language is not English (PLNE), you may be eligible for extended testing time. For more details, visit www.ets.org/praxis/register/plne_accommodations/.

What if I have a disability or other health-related need?

The following accommodations are available for *Praxis* test takers who meet the Americans with Disabilities Act (ADA) Amendments Act disability requirements:

- Extended testing time
- Additional rest breaks
- Separate testing room
- Writer/recorder of answers
- Test reader
- Sign language interpreter for spoken directions only
- Perkins Brailler
- Braille slate and stylus
- Printed copy of spoken directions
- Oral interpreter
- Audio test
- Braille test
- Large print test book
- Large print answer sheet
- Listening section omitted

For more information on these accommodations, visit www.ets.org/praxis/register/disabilities.

Note: Test takers who have health-related needs requiring them to bring equipment, beverages, or snacks into the testing room or to take extra or extended breaks must request these accommodations by following the procedures described in the *Bulletin Supplement for Test Takers with Disabilities or Health-Related Needs* (PDF), which can be found at http://www.ets.org/s/disabilities/pdf/bulletin_supplement_test_takers_with_disabilities_health_needs.pdf.

You can find additional information on available resources for test takers with disabilities or health-related needs at www.ets.org/disabilities.

9. Do Your Best on Test Day

Get ready for test day so you will be calm and confident

You followed your study plan. You prepared for the test. Now it's time to prepare for test day.

Plan to end your review a day or two before the actual test date so you avoid cramming. Take a dry run to the test center so you're sure of the route, traffic conditions, and parking. Most of all, you want to eliminate any unexpected factors that could distract you from your ultimate goal—passing the *Praxis* test!

On the day of the test, you should:

- be well rested
- wear comfortable clothes and dress in layers
- eat before you take the test
- bring an acceptable and valid photo identification with you
- bring an approved calculator only if one is specifically permitted for the test you are taking (see Calculator Use, at http://www.ets.org/praxis/test_day/policies/calculators)
- be prepared to stand in line to check in or to wait while other test takers check in

You can't control the testing situation, but you can control yourself. Stay calm. The supervisors are well trained and make every effort to provide uniform testing conditions, but don't let it bother you if the test doesn't start exactly on time. You will have the allotted amount of time once it does start.

You can think of preparing for this test as training for an athletic event. Once you've trained, prepared, and rested, give it everything you've got.

What items am I restricted from bringing into the test center?

You cannot bring into the test center personal items such as:

- handbags, knapsacks, or briefcases
- water bottles or canned or bottled beverages
- study materials, books, or notes
- pens, pencils, scrap paper, or calculators, unless specifically permitted for the test you are taking (see Calculator Use, at http://www.ets.org/praxis/test_day/policies/calculators)
- any electronic, photographic, recording, or listening devices

Personal items are not allowed in the testing room and will not be available to you during the test or during breaks. You may also be asked to empty your pockets. At some centers, you will be assigned a space to store your belongings, such as handbags and study materials. Some centers do not have secure storage space available, so please plan accordingly.

Test centers assume no responsibility for your personal items.

If you have health-related needs requiring you to bring equipment, beverages or snacks into the testing room or to take extra or extended breaks, you need to request accommodations in advance. Procedures for requesting accommodations are described in the Bulletin Supplement for Test Takers with Disabilities or Health-related Needs (PDF).

Note: All cell phones, smart phones (e.g., Android® devices, iPhones®, etc.), and other electronic, photographic, recording, or listening devices are strictly prohibited from the test center. If you are seen with such a device, you will be dismissed from the test, your test scores will be canceled, and you will forfeit your test fees. If you are seen *using* such a device, the device will be confiscated and inspected. For more information on what you can bring to the test center, visit www.ets.org/praxis/test_day/bring.

Are You Ready?

Complete this checklist to determine whether you are ready to take your test.

- ❒ Do you know the testing requirements for the license or certification you are seeking in the state(s) where you plan to teach?
- ❒ Have you followed all of the test registration procedures?
- ❒ Do you know the topics that will be covered in each test you plan to take?
- ❒ Have you reviewed any textbooks, class notes, and course readings that relate to the topics covered?
- ❒ Do you know how long the test will take and the number of questions it contains?
- ❒ Have you considered how you will pace your work?
- ❒ Are you familiar with the types of questions for your test?
- ❒ Are you familiar with the recommended test-taking strategies?
- ❒ Have you practiced by working through the practice questions in this study companion or in a study guide or practice test?
- ❒ If constructed-response questions are part of your test, do you understand the scoring criteria for these questions?
- ❒ If you are repeating a *Praxis* test, have you analyzed your previous score report to determine areas where additional study and test preparation could be useful?

If you answered "yes" to the questions above, your preparation has paid off. Now take the *Praxis* test, do your best, pass it—and begin your teaching career!

10. Understand Your Scores

Understand how tests are scored and how to interpret your test scores

Of course, passing the *Praxis* test is important to you so you need to understand what your scores mean and what your state requirements are.

What are the score requirements for my state?

States, institutions, and associations that require the tests set their own passing scores. Visit www.ets.org/praxis/states for the most up-to-date information.

If I move to another state, will my new state accept my scores?

The *Praxis* tests are part of a national testing program, meaning that they are required in many states for licensure. The advantage of a national program is that if you move to another state that also requires *Praxis* tests, you can transfer your scores. Each state has specific test requirements and passing scores, which you can find at www.ets.org/praxis/states.

How do I know whether I passed the test?

Your score report will include information on passing scores for the states you identified as recipients of your test results. If you test in a state with automatic score reporting, you will also receive passing score information for that state.

A list of states and their passing scores for each test are available online at www.ets.org/praxis/states.

What your *Praxis* scores mean

You received your score report. Now what does it mean? It's important to interpret your score report correctly and to know what to do if you have questions about your scores.

Visit http://www.ets.org/s/praxis/pdf/sample_score_report.pdf to see a sample score report.
To access *Understanding Your Praxis Scores*, a document that provides additional information on how to read your score report, visit www.ets.org/praxis/scores/understand.

Put your scores in perspective

Your score report indicates:

- Your score and whether you passed
- The range of possible scores
- The raw points available in each content category
- The range of the middle 50 percent of scores on the test

If you have taken the same *Praxis* test or other *Praxis* tests in the last 10 years, your score report also lists the highest score you earned on each test taken.

Content category scores and score interpretation

Questions on the *Praxis* tests are categorized by content. To help you in future study or in preparing to retake the test, your score report shows how many raw points you earned in each content category. Compare your "raw points earned" with the maximum points you could have earned ("raw points available"). The greater the difference, the greater the opportunity to improve your score by further study.

Score scale changes

ETS updates *Praxis* tests on a regular basis to ensure they accurately measure the knowledge and skills that are required for licensure. When tests are updated, the meaning of the score scale may change, so requirements may vary between the new and previous versions. All scores for previous, discontinued tests are valid and reportable for 10 years, provided that your state or licensing agency still accepts them.

These resources may also help you interpret your scores:

- *Understanding Your Praxis Scores* (PDF), found at www.ets.org/praxis/scores/understand
- *The Praxis Passing Scores* (PDF), found at www.ets.org/praxis/scores/understand
- State requirements, found at www.ets.org/praxis/states

Appendix: Other Questions You May Have

Here is some supplemental information that can give you a better understanding of the *Praxis* tests.

What do the *Praxis* tests measure?

The *Praxis* tests measure the specific knowledge and skills that beginning teachers need. The tests do not measure an individual's disposition toward teaching or potential for success, nor do they measure your actual teaching ability. The assessments are designed to be comprehensive and inclusive but are limited to what can be covered in a finite number of questions and question types. Teaching requires many complex skills that are typically measured in other ways, including classroom observation, video recordings, and portfolios.

Ranging from Agriculture to World Languages, there are more than 80 *Praxis* tests, which contain selected-response questions or constructed-response questions, or a combination of both.

Who takes the tests and why?

Some colleges and universities use the *Praxis* Core Academic Skills for Educators tests (Reading, Writing, and Mathematics) to evaluate individuals for entry into teacher education programs. The assessments are generally taken early in your college career. Many states also require Core Academic Skills test scores as part of their teacher licensing process.

Individuals entering the teaching profession take the *Praxis* content and pedagogy tests as part of the teacher licensing and certification process required by many states. In addition, some professional associations and organizations require *Praxis* Subject Assessments for professional licensing.

Do all states require these tests?

The *Praxis* tests are currently required for teacher licensure in approximately 40 states and United States territories. These tests are also used by several professional licensing agencies and by several hundred colleges and universities. Teacher candidates can test in one state and submit their scores in any other state that requires *Praxis* testing for licensure. You can find details at www.ets.org/praxis/states.

What is licensure/certification?

Licensure in any area—medicine, law, architecture, accounting, cosmetology—is an assurance to the public that the person holding the license possesses sufficient knowledge and skills to perform important occupational activities safely and effectively. In the case of teacher licensing, a license tells the public that the individual has met predefined competency standards for beginning teaching practice.

Because a license makes such a serious claim about its holder, licensure tests are usually quite demanding. In some fields, licensure tests have more than one part and last for more than one day. Candidates for licensure in all fields plan intensive study as part of their professional preparation. Some join study groups, others study alone. But preparing to take a licensure test is, in all cases, a professional activity. Because a licensure exam surveys a broad body of knowledge, preparing for a licensure exam takes planning, discipline, and sustained effort.

Why does my state require the *Praxis* tests?

Your state chose the *Praxis* tests because they assess the breadth and depth of content—called the "domain"—that your state wants its teachers to possess before they begin to teach. The level of content knowledge, reflected in the passing score, is based on recommendations of panels of teachers and teacher educators in

each subject area. The state licensing agency and, in some states, the state legislature ratify the passing scores that have been recommended by panels of teachers.

How were the tests developed?

ETS consulted with practicing teachers and teacher educators around the country during every step of the *Praxis* test development process. First, ETS asked them what knowledge and skills a beginning teacher needs to be effective. Their responses were then ranked in order of importance and reviewed by hundreds of teachers.

After the results were analyzed and consensus was reached, guidelines, or specifications, for the selected-response and constructed-response tests were developed by teachers and teacher educators. Following these guidelines, teachers and professional test developers created test questions that met content requirements and *ETS Standards for Quality and Fairness*.*

When your state adopted the research-based *Praxis* tests, local panels of teachers and teacher educators evaluated each question for its relevance to beginning teachers in your state. During this "validity study," the panel also provided a passing-score recommendation based on how many of the test questions a beginning teacher in your state would be able to answer correctly. Your state's licensing agency determined the final passing-score requirement.

ETS follows well-established industry procedures and standards designed to ensure that the tests measure what they are intended to measure. When you pass the *Praxis* tests your state requires, you are proving that you have the knowledge and skills you need to begin your teaching career.

How are the tests updated to ensure the content remains current?

Praxis tests are reviewed regularly. During the first phase of review, ETS conducts an analysis of relevant state and association standards and of the current test content. State licensure titles and the results of relevant job analyses are also considered. Revised test questions are then produced following the standard test development methodology. National advisory committees may also be convened to review and revise existing test specifications and to evaluate test forms for alignment with the specifications.

How long will it take to receive my scores?

Scores for tests that do not include constructed-response questions are available on screen immediately after the test. Scores for tests that contain constructed-response questions or essays aren't available immediately after the test because of the scoring process involved. Official score reports are available to you and your designated score recipients approximately two to three weeks after the test date for tests delivered continuously, or two to three weeks after the testing window closes for other tests. See the test dates and deadlines calendar at www.ets.org/praxis/register/centers_dates for exact score reporting dates.

Can I access my scores on the web?

All test takers can access their test scores via My *Praxis* Account free of charge for one year from the posting date. This online access replaces the mailing of a paper score report.

The process is easy—simply log into My *Praxis* Account at www.ets.org/praxis and click on your score report. If you do not already have a *Praxis* account, you must create one to view your scores.

Note: You must create a *Praxis* account to access your scores, even if you registered by mail or phone.

**ETS Standards for Quality and Fairness* (2014, Princeton, N.J.) are consistent with the *Standards for Educational and Psychological Testing*, industry standards issued jointly by the American Educational Research Association, the American Psychological Association, and the National Council on Measurement in Education (2014, Washington, D.C.).

Your teaching career is worth preparing for, so start today!

Let the *Praxis*® *Study Companion* guide you.

To search for the *Praxis* test prep resources that meet your specific needs, visit:

www.ets.org/praxis/testprep

To purchase official test prep made by the creators of the *Praxis* tests, visit the ETS Store:

www.ets.org/praxis/store

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