# ORELA

## MULTIPLE SUBJECTS
## 001, 002, 003

## *SAMPLE TEST*

## ORELA Multiple Subjects 001, 002, 003 Sample Test

**LANGUAGE ARTS**

1.  **Prewriting is considered an important step in a child's development of writing skills. Which of the following is considered a part of prewriting?**
    *(Average) (Skill 2.1)*

    A. Clustering
    B. Listing
    C. Mapping
    D. All of the above

2.  **Ants have three main parts to their bodies. The first part is the head which contains the jaws, eyes, and antennae. The second part is the trunk, which has six legs attached to it. The third part of an ant's body is the rear. I was surprised to learn that the rear contains a poison sac. This is one way the any defends itself.**

    **What type of writing is demonstrated in the passage above?**
    *(Rigorous) (Skill 2.2)*

    A. Narration
    B. Expository
    C. Persuasion
    D. Persuasive

3.  **Writing that is intended to change the reader's mind is called:**
    *(Easy) (Skill 2.2)*

    A. Narration
    B. Expository
    C. Persuasion
    D. Description

4.  **Which of the following is a complex sentence?**
    *(Rigorous) (Skill 2.3)*

    A. Anna and Margaret read a total of fifty-four books during summer vacation.
    B. The youngest boy on the team had the best earned run average, which mystifies the coaching staff.
    C. Earl decided to attend Princeton; his twin brother Roy, who aced the ASVAB test, will be going to Annapolis.
    D. "Easy come, easy go," Marcia moaned.

5.  **What type of sentence is the sentence below?**
    *Millie and Max seemed tired and bored.*
    *(Rigorous) (Skill 2.3)*

    A. Simple
    B. Compound
    C. Complex
    D. Compound/complex

6.  **Which of the following contains an error in possessive inflection?**
    *(Rigorous) (Skill 2.5)*

    A. Doris's shawl
    B. Mother's-in-law frown
    C. Children's lunches
    D. Embassador's briefcase

7. **Which of the following sentences contains a subject-verb agreement error?**
*(Average) (Skill 2.5)*

A. Both mother and her two sisters were married in a triple ceremony.
B. Neither the hen nor the rooster is likely to be served for dinner.
C. My boss, as well as the company's two personnel directors, have been to Spain.
D. Amanda and the twins are late again.

8. **What is the plural of the word _rose_?**
*(Easy) (Skill 2.5)*

A. Rosis
B. Rosses
C. Roses
D. Rose's

9. **The following words are made plural correctly EXCEPT:**
*(Rigorous) (Skill 2.5)*

A. Radios
B. Bananas
C. Poppies
D. Tomatos

10. **Which of the following sentences is properly punctuated?**
*(Easy) (Skill 2.6)*

A. The more you eat; the more you want.
B. The authors—John Steinbeck, Ernest Hemingway, and William Faulkner—are staples of modern writing in American literature textbooks.
C. Handling a wild horse, takes a great deal of skill and patience.
D. The man who replaced our teacher, is a comedian.

11. **Which of the following sentences contains a capitalization error?**
*(Average) (Skill 2.6)*

A. The commander of the English navy was Admiral Nelson.
B. Napoleon was the president of the French First Republic.
C. Queen Elizabeth II is the Monarch of the British Empire.
D. William the Conqueror led the Normans to victory over the British.

12. **Which sentence is NOT punctuated correctly?**
    *(Rigorous) (Skill 2.6)*

    A. The more he knew about her, the less he wished he had known.
    B. Ellen daydreamed about getting out of the rain, taking a shower and eating a hot dinner.
    C. The veterinarian, not his assistant, would perform the delicate surgery.
    D. His thorough, though esoteric, scientific research could not easily be understood by high school students.

13. **Which of the following is NOT a characteristic of a fable?**
    *(Average) (Skill 3.1)*

    A. Animals that feel and talk like humans
    B. Happy solutions to human dilemmas
    C. Teaches a moral or standard for behavior
    D. Illustrates specific peoples or groups without directly naming them

14. **Which is an untrue statement about a theme in literature?**
    *(Average) (Skill 3.3)*

    A. The theme is always stated directly somewhere in the text
    B. The theme is the central idea in a literary work
    C. All parts of the work (plot, setting, mood) should contribute to the theme in some way
    D. By analyzing the various elements of the work, the reader should be able to arrive at an indirectly stated theme

15. **Which of the following is considered a nontraditional literary form?**
    *(Easy) (Skill 3.6)*

    A. Editorial cartoon
    B. Poem
    C. Speech
    D. Play

16. **An example of something that is not a primary source is:**
    *(Average) (Skill 4.2)*

    A. The published correspondence between Winston Churchill and Franklin D. Roosevelt during World War II
    B. Martin Gilbert's biography of Winston Churchill
    C. The diary of Field Marshall Sir Alan Brooke, the head of the British Army during World War II
    D. Franklin D. Roosevelt's handwritten notes from the World War II era

17. Which of the following is NOT an accurate statement?
*(Rigorous) (Skill 4.2)*

A. Direct quotes should be enclosed in quotation marks and the source should be cited
B. You should cite a source for any information that is not common knowledge
C. You should keep a records of all sources consulted during the research process
D. Summarizing someone else's wording and putting it into your own words is always a safe way to avoid plagiarism

18. Which of the following can be potential penalties for plagiarism and copyright violation?
*(Average) (Skill 4.3)*

A. Failing an assignment or losing credit for an entire course
B. Civil or criminal penalties
C. Expulsion from a learning environment
D. All of the above

## SOCIAL SCIENCE

19. Government ultimately began as a form of:
*(Easy) (Skill 5.1)*

A. Laws
B. Censorship
C. Protection
D. Liberty

20. Which of the following are powers delegated solely to the federal government?
*(Rigorous) (Skill 5.2)*

A. Grant patents, establish courts, borrow money
B. To tax, establish courts, declare war
C. Regulate intrastate trade, declare war, protect life and property
D. Conduct foreign affairs, conduct elections, to tax

21. Which one of the three branches of government has the power to impeach the President of the United States?
*(Easy) (Skill 5.3)*

A. Judicial
B. Executive
C. Legislative
D. All of the above

22. Which of the following lists elements usually considered to be responsibilities of citizenship under the American system of government?
*(Average) (Skill 5.4)*

A. Serving in public office, voluntary government service, military duty
B. Paying taxes, jury duty, upholding the Constitution
C. Maintaining a job, giving to charity, turning in fugitives
D. Quartering of soldiers, bearing arms, government service

23. When consumers buy the goods and services that give them the most satisfaction, this is an example of:
    *(Average) (Skill 6.1)*

    A. Consumer sovereignty
    B. Utility
    C. Medium of exchange
    D. Price

24. Economics is defined as a study of:
    *(Rigorous) (Skill 6.2)*

    A. How scarce resources are allocated to satisfy unlimited wants
    B. Anything that is manufactured to be used in the production process
    C. Anyone who sells his ability to produce goods and services
    D. Decisions of buyers are equal to the selling decision of seller

25. Laissez-faire capitalism is based on:
    *(Easy) (Skill 6.3)*

    A. Government ownership of the means of production
    B. Custom and usually exists in less developed countries
    C. The premise of no government intervention in the economy
    D. None of the above

26. Capitalism and communism are alike in that they are both:
    *(Rigorous) (Skill 6.3)*

    A. Organic systems
    B. Political systems
    C. Centrally planned systems
    D. Economic systems

27. Globalization refers to which of the following:
    *(Rigorous) (Skill 6.4)*

    A. Exchange of money, information, and ideas
    B. Social and economic change
    C. Cultural assimilation
    D. All of the above

28. The fundamental characteristic of the U.S. economic system is:
    (*Average) (Skill 6.5)*

    A. The use of competition and markets
    B. Stocks and bonds
    C. Profit sharing
    D. Interest rates

29. The term spatial organization refers to:
    (*Average) (Skill 7.1)*

    A. Latitude and longitude lines
    B. The alignment of the stars
    C. How things are grouped in a given space
    D. The space between point A and point B

30. The process of putting the features of the Earth onto a flat surface is called:
(Average) (Skill 7.2)

A. Distortion
B. Projection
C. Cartography
D. Illustration

31. Vital statistics, social trends, and crude rates are all a part of a branch of Science of Statistics, which is concerned with the social well being of people. What is the name of this branch of Science?
(Average) (Skill 7.3)

A. Cartography
B. Sociology
C. Demography
D. Psychology

32. A condition in which two organisms of different species are able to live in the same environment over an extended period of time without harming one another is called:
(Rigorous) (Skill 7.5)

A. Symbiosis
B. Biodiversity
C. Habitat
D. Ecosystem

33. The practice of dividing time into a number of discrete periods or blocks of time is called:
(Easy) (Skill 8.1)

A. Eras
B. Chronological time
C. Periodization
D. Years

34. This country is considered by some historians to be the oldest, uninterrupted civilization in the world.
(Easy) (Skill 8.2)

A. Japan
B. China
C. Canada
D. Mexico

35. The Agricultural Revolution was initiated by the invention of the:
(Easy) (Skill 8.3)

A. Typewriter
B. iPod
C. Telephone
D. Plow

36. The Polish-born astronomer _____ began the Scientific Revolution, stating that the Sun, not the Earth, was the center of a solar system and that other planets revolved around the Sun, not the Earth.
(Rigorous) (Skill 8.3)

A. Nicolaus Copernicus
B. Galileo Galilei
C. Isaac Newton
D. Tycho Brahe

37. The end of the feudal manorial system was caused by:
(Average) (Skill 8.3)

A. The Civil War
B. The Black Death
C. The Christian Riots
D. Westward Expansion

38. The social results of the Industrial Revolution included:
*(Average) (Skill 8.3)*

A. The emancipation of women
B. The decline of religion
C. Growth of great cities
D. All of the above

39. Of all the major causes of both World Wars I and II, the most significant one is considered to be:
*(Rigorous) (Skill 8.4)*

A. Extreme nationalism
B. Military buildup and aggression
C. Political unrest
D. Agreements and alliances

40. World War II, which began September 1, 1939, and ended September 2, 1945, included a total of how many nations involved?
*(Rigorous) (Skill 8.4)*

A. 8
B. 92
C. 17
D. 59

41. *Historic causation* is the concept that events in history are:
*(Easy) (Skill 8.5)*

A. The ordering of events through time
B. Linked to one another by an endless chain of cause and effect
C. Not mandated by time
D. None of the above

42. _____ is the belief that one's own culture is the central and superior culture.
*(Average) (Skill 8.6)*

A. Ethnocentrism
B. Egocentric
C. Prejudice
D. Superiority

43. The belief that the United States should control all of North America was called:
*(Easy) (Skill 9.1)*

A. Westward Expansion
B. Pan Americanism
C. Manifest Destiny
D. Nationalism

44. The area of the United States was effectively doubled through purchase of the Louisiana Territory under which President?
*(Average) (Skill 9.1)*

A. John Adams
B. Thomas Jefferson
C. James Madison
D. James Monroe

45. Which if the following wars have been called "the first modern war"?
*(Average) (Skill 9.1)*

A. War of 1812
B. Civil War
C. Spanish-American War
D. Revolutionary War

46. **Jim Crow laws dealt with:**
    *(Average) (Skill 9.1)*

    A. Minority rights
    B. Animal control
    C. Segregation
    D. Adoption

47. **Which President made this now famous remark in his Inauguration Speech? "Ask not what your country can do for you—ask what you can do for your country."**
    (*Rigorous*) *(Skill 9.1)*

    A. Eisenhower
    B. Reagan
    C. Lincoln
    D. Kennedy

48. **Prior to becoming an official part of the United States, Oregon was an international territory shared with what country?**
    *(Rigorous) (Skill 9.5)*

    A. France
    B. Spain
    C. Britain
    D. Mexico

49. **Analyzing an event or issue from multiple perspectives involves which of the following?**
    *(Rigorous) (Skill 10.3)*

    A. Seeking out sources that advocate the perspective
    B. Comparing sources with one another
    C. Understanding the bias of each perspective
    D. All of the above

50. **Which of these methods can be used to analyze social phenomena in their relation to historical events?**
    (*Rigorous*) *(Skill 10.4)*

    A. Interviews
    B. Statistical evaluations
    C. Observation and experimentation
    D. All of the above

## ARTS

51. **Which of the following is an example of a student applying his skills to visual art?**
    *(Average) (Skill 11.1)*

    A. Selecting a medium for a work based on an experience
    B. Working with others to plan and produce a group project
    C. Using primary colors to paint a picture from nature
    D. All of the above

52. **The visual arts can include the following:**
    (*Average) (Skill 11.2)*

    A. Architecture
    B. Painting
    C. Mosaic
    D. All of the above

53. **The 18th century is referred to as the:**
    *(Rigorous) (Skill 11.3)*

    A. Age of Enlightenment
    B. Age of Modernism
    C. Age of Social Art
    D. Age of History

54. _____ is an artistic form of self expression that uses the various elements of dance such as use of space, time, levels, and force.
*(Easy) (Skill 12.2)*

    A. Rock-climbing
    B. Skiing
    C. Dance
    D. Swimming

55. The history of theatre can be dated back to:
*(Rigorous) (Skill 12.3)*

    A. Late 6th century in Greece
    B. Early 9th century in Italy
    C. Early 6th century in Greece
    D. Late 9th century in Italy

56. Drama was expressed in many Greek spiritual ceremonies. Name the two main forms of dramatic forms.
*(Rigorous) (Skill 12.3)*

    A. Comedy and realism
    B. Tragedy and comedy
    C. Realism and drama
    D. Comedy and drama

57. Which of the following are *styles* of dance?
*(Easy)(Skill 12.4)*

    A. Creative
    B. Modern
    C. Ritual
    D. All of the above

58. A combination of three or more tones sounded at the same time is called a:
*(Rigorous) (Skill 13.1)*

    A. Harmony
    B. Consonance
    C. A chord
    D. Dissonance

59. Most Western music is based on which type of rhythm?
*(Rigorous) (Skill 13.1)*

    A. Additive
    B. Divisive
    C. Modern
    D. Classical

60. Which of the following are characteristic of a ballad?
*(Average) (Skill 13.2)*

    A. Interaction between the singer and listener, in which the listener sings a response to the singer
    B. Contains a story and has simple, repeating rhymes that are sung at regular intervals throughout the song
    C. An emphasis on rhythm and the use of percussion and amplified instruments like bass and guitar
    D. An absence of lyrics; instrumental in nature

61. Jazz is a form of music that grew out of which influences?
*(Average) (Skill 13.2)*

    A. Baroque music
    B. Rock and roll and folk music
    C. Classical music
    D. Folk music, ragtime, and band music

62. **For students, an education in the arts provides:**
    (*Average*) *(Skill 13.4)*

    A. The ability to be creative and inventive decision-makers
    B. An increased ability to achieve across the curriculum
    C. Increased potential for life success
    D. All of the above

## READING INSTRUCTION

63. **The major difference between phonemic and phonological awareness is:**
    (*Rigorous*) *(Skill 14.1, 14.2)*

    A. One deals with a series of discrete sounds and sound spelling relationships
    B. One is involved with teaching and learning alliteration and rhymes
    C. Phonemic awareness is a specific type phonological awareness that deals with separate phonemes within a given word
    D. Phonological awareness is associated with printed words

64. **"Beautiful Beth is the Best Girl in the Bradley Bay area." This sentence could be used to help children learn about:**
    (*Easy*) *(Skill 14.3)*

    A. Assonance
    B. Alliteration
    C. Rhyming pairs
    D. None of the above

65. **All of the following are true about phonological awareness EXCEPT:**
    (*Rigorous*) *(Skill 14.3)*

    A. It may involve print
    B. It is a prerequisite for spelling and phonics
    C. Activities can be done by the children with their eyes closed
    D. Starts before letter recognition is taught

66. **To decode is to:**
    (*Average*) *(Skill 15.1)*

    A. Change communication signals into messages
    B. Sound out a printed sequence of letters
    C. Use a special code to decipher a message
    D. None of the above

67. **Randy is proud of how many new vocabulary words he has learned. He enjoys playing with a device his teacher has, since it helps him to show all the words he can create from various letters. The device is a:**
    (*Average*) *(Skill 15.2)*

    A. Word strip
    B. Letter holder for making words
    C. Word mask
    D. None of the above

**68. Which of the following is true about sight words?**
(*Average*) (*Skill 15.5*)

A. Do not sound like their spellings might suggest
B. Usually not decodable
C. Must be memorized
D. All of The above

**69. Contextual Redefinition supports children to use the context more effectively by presenting them with sufficient context _____ they read.**
(*Rigorous*) (*Skill 15.6*)

A. While
B. During
C. Before
D. None of the above

**70. To encode means that you:**
(*Easy*) (*Skill 15.7*)

A. Decode a second time
B. Change a message into symbols
C. Tell someone a message
D. None of the above

**71. Ascribing meaning to text refers to:**
(*Rigorous*) (*Skill 15.7*)

A. Comprehension
B. Word analysis
C. Word recognition
D. Knowledge

**72. Which of the following can students use to help determine the meaning of an unfamiliar word?**
(*Average*) (*Skill 16.1*)

A. Root words
B. Antonyms
C. Word forms
D. All of the above

**73. _____ are diagrams that help students see how words or concepts are related to one another.**
(*Rigorous*) (*Skill 16.2*)

A. Word sorts
B. Word banks
C. Semantic maps
D. Read alouds

**74. Words have denotative and connotative meanings. *Connotative* refers to:**
(*Rigorous*) (*Skill 16.3*)

A. Mental suggestions that the words convey
B. The actual spelling of the word
C. The implied meaning of the word
D. The definition of the word

**75. Which of the following is true of expository texts?**
(*Average*) (*Skill 17.2*)

A. May or may not be factual
B. May reflect the bias of the author
C. May be found in newspapers
D. All of the above

76. The following clue words: "therefore," "as a result of," "because," "since," are a part of what type of text?
(*Average*) (*Skill 17.2*)

A. Comparison text
B. Descriptive text
C. Causation text
D. Collection text

77. An example of a collection text would be:
(*Average*) (*Skill 17.2*)

A. Newspaper article
B. Recipe
C. Essay paper
D. Homework assignment

78. Which of the following is a type of expository texts?
(*Average*) (*Skill 17.2*)

A. Cause-Effect text
B. Collection text
C. Response text
D. All of the above

79. _____ is an evaluative process that involves the reader making a reasonable judgment based on the information given.
(*Average*) (*Skill 18.1*)

A. Comparison
B. Inference
C. Evaluation
D. Description

80. Cognitive learning theories suggest that learning takes place:
(*Easy*) (*Skill 18.2*)

A. By writing a paper
B. In the mind
C. By reading a book
D. By memorizing words

81. Behavioral learning theory suggests that people:
(*Average*) (*Skill 18.2*)

A. Learn socially
B. Learn through stimulation
C. Learn through repetition
D. All of the above

82. Most educators believe that children learn:
(*Rigorous*) (*Skill 18.2*)

A. Cognitively
B. Behaviorally
C. Physically
D. Emotionally

83. Cause and Effect writing usually explains the _____ of the text.
(*Rigorous*) (*Skill 18.3*)

A. Who and when
B. When and why
C. Why and what
D. Who and why

84. A K-W-L chart is which of the following?
(*Average*) (*Skill 18.4*)

A. Graphic organizer
B. Abbreviations chart
C. Word list
D. Venn diagram

85. **K-W-L charts are useful for which of the following?**
    *(Easy) (Skill 18.4)*

    A. Comprehension of expository text
    B. Format for note taking
    C. Report writing
    D. All of the above

86. **Which of the following is an excellent source for a ELL student to develop their expository skills?**
    *(Rigorous) (Skill 18.5)*

    A. Reading a newspaper
    B. Writing a poem
    C. Giving a speech
    D. Acting in a play

87. **What is a good method for Special Needs learners to learn to identify various points of view?**
    (*Rigorous) (Skill 18.5)*

    A. Draw a picture
    B. Watch a movie
    C. Read a poem
    D. Read a cartoon

**Constructed Response Sample Question: Language Arts**

**SAMPLE ESSAY QUESTION**

**Read the passage below from *The Diary of Anne Frank* (1947); then complete the exercise that follows.**

Written on July 15, 1944, three weeks before the Frank family was arrested by the Nazis, Anne's diary entry explains her worldview and future hopes.

*It's difficult in times like these: ideals, dreams and cherished hopes rise within us, only to be crushed by grim reality. It's a wonder I haven't abandoned all my ideals, they seem so absurd and impractical. Yet I cling to them because I still believe, in spite of everything, that people are truly good at heart.*
*It's utterly impossible for me to build my life on a foundation of chaos, suffering and death. I see the world being slowly transformed into a wilderness, I hear the approaching thunder that, one day, will destroy us too, I feel the suffering of millions, And yet, when I look up at the sky, I somehow feel that everything will change for the better, that this cruelty too shall end, that peace and tranquility will return once more. In the meantime, I must hold on to my ideals. Perhaps the day will come when I will be able to realize them!*

Using your knowledge of literature, write a response in which you:

- ⊙ Compare and contrast Anne's ideals with her awareness of the conditions in which she lives
- ⊙ Discuss how the structure of Anne's writing—her sentences and paragraphs—emphasize the above contrast

**Constructed Response Sample Question: Social Science**

**SAMPLE ESSAY QUESTION**

You are a 5th grade teacher. The Reading/Language Arts curriculum used in your classroom dominates over half of the school day. The Math curriculum encompasses almost the other half of the school day. Because of the extreme importance placed on standardized tests, the resulting AIP and AYP scores, and how they affect the school's funding, the district has labeled items in the curriculums as "non-negotiable." These "non-negotiable" items leave very little room in the school day for Science and Social Studies curriculum.

The 6th grade teachers at the local middle school have voiced numerous concerns regarding how unprepared the incoming 6th graders are for Social Studies and Science and how they have to spend at least the first month of the school year teaching the students Social Studies and Science skills to be able to start the 6th grade curriculum. These teachers are frustrated and enraged that required state standards are being overlooked at the elementary school level leaving students unprepared for the middle school curriculum.

After meeting as a grade level, you have volunteered to create a plan for teaching Social Studies to the students. Knowing that you cannot eliminate any of the Language Arts and Math "non-negotiable" items, you can only find 30 minutes of time 1 day a week to teach Social Studies to your 5th graders.

Develop an instructional plan to teach Social Studies within the 30-minute time slot 1 day a week. Be sure to include specific objectives, goals, and activities for one unit of study.

**Answer Key: Language Arts, Social Science, Arts, Reading Instruction**

| | | |
|---|---|---|
| 1. D | 30. B | 59. B |
| 2. C | 31. C | 60. B |
| 3. C | 32. A | 61. D |
| 4. B | 33. C | 62. D |
| 5. A | 34. B | 63. A |
| 6. B | 35. D | 64. B |
| 7. C | 36. A | 65. A |
| 8. C | 37. B | 66. A |
| 9. D | 38. D | 67. B |
| 10. B | 39. A | 68. D |
| 11. C | 40. D | 69. C |
| 12. B | 41. B | 70. B |
| 13. D | 42. A | 71. A |
| 14. A | 43. C | 72. D |
| 15. A | 44. B | 73. C |
| 16. B | 45. B | 74. A |
| 17. D | 46. C | 75. D |
| 18. D | 47. D | 76. C |
| 19. C | 48. C | 77. B |
| 20. B | 49. D | 78. D |
| 21. C | 50. D | 79. B |
| 22. B | 51. D | 80. B |
| 23. B | 52. D | 81. D |
| 24. A | 53. A | 82. A |
| 25. C | 54. C | 83. C |
| 26. D | 55. C | 84. A |
| 27. D | 56. B | 85. D |
| 28. A | 57. D | 86. A |
| 29. C | 58. C | 87. D |

**Rigor Table: Language Arts, Social Science, Arts, Reading Instruction**

|  | Easy 21% | Average 41% | Rigorous 38% |
|---|---|---|---|
| **Question #** | 3, 8, 10, 15, 19, 21, 25, 33, 34, 35, 41, 43, 54, 57, 64, 70, 80, 85 | 1, 7, 11, 13, 14, 16, 18, 22, 23, 28, 29, 30, 31, 37, 38, 42, 44, 45, 46, 51, 52, 60, 61, 62, 66, 67, 68, 72, 75, 76, 77, 78, 79, 81, 82, 84 | 2, 4, 5, 6, 9, 12, 17, 20, 24, 26, 27, 32, 36, 39, 40, 47, 48, 49, 50, 53, 55, 56, 58, 59, 63, 65, 69, 71, 73, 74, 83, 86, 87 |

**ORELA Multiple Subjects 001, 002, 003 Sample Test with Rationales**

**LANGUAGE ARTS**

1. **Prewriting is considered an important step in a child's development of writing skills. Which of the following is considered a part of prewriting?** *(Average) (Skill 2.1)*

   A. Clustering
   B. Listing
   C. Mapping
   D. All of the above

**Answer: D. All of the above**
Students gather their ideas before writing. Prewriting may include: clustering, listing, brainstorming, mapping, and charting. Writing is a recursive process, and students can also improve their cognitive skills.

2. **Ants have three main parts to their bodies. The first part is the head which contains the jaws, eyes, and antennae. The second part is the trunk, which has six legs attached to it. The third part of an ant's body is the rear. I was surprised to learn that the rear contains a poison sac. This is one way the any defends itself.**

   **What type of writing is demonstrated in the passage above?** *(Rigorous) (Skill 2.2)*

   A. Descriptive
   B. Narrative
   C. Expository
   D. Persuasive

**Answer: C. Expository**
The passage was written to inform the reader about the parts of an ant's body, therefore, it is expository. Had the author described what they saw when they looked at an ant under a microscope, it would be a descriptive passage.

3. **Writing that is intended to change the reader's mind is called:**
   *(Easy) (Skill 2.2)*

   A.   Narration
   B.   Expository
   C.   Persuasion
   D.   Description

**Answer: C. Persuasion**
Persuasion is a piece of writing, a poem, a play, or a speech whose purpose is to change the minds of the audience members or to get them to do something. Exposition is discourse whose only purpose is to inform. Narration is discourse that is arranged chronologically: something happened, and then something else happened, and then something else happened. Description is discourse whose purpose is to make an experience available through one of the five senses: seeing, smelling, hearing, feeling (as with the fingers), and tasting.

4. **Which of the following is a complex sentence?**
   *(Rigorous) (Skill 2.3)*

   A.   Anna and Margaret read a total of fifty-four books during summer vacation.
   B.   The youngest boy on the team had the best earned run average, which mystifies the coaching staff.
   C.   Earl decided to attend Princeton; his twin brother Roy, who aced the ASVAB test, will be going to Annapolis.
   D.   "Easy come, easy go," Marcia moaned.

**Answer: B. The youngest boy on the team had the best earned run average, which mystifies the coaching staff.**
Here, the use of the relative pronoun "which," whose antecedent is "the best run average, introduces a clause that is dependent on the independent clause "The youngest boy on the team had the best run average." The idea expressed in the subordinate clause is subordinate to the one expressed in the independent clause.

5.  **What type of sentence is the sentence below?**
    *Millie and Max seemed tired and bored.*
    *(Rigorous) (Skill 2.3)*

    A.  Simple
    B.  Compound
    C.  Complex
    D.  Compound/complex

**Answer: A. Simple**
The sentence has a compound subject but there is only one verb. Therefore, it is a simple sentence.

6.  **Which of the following contains an error in possessive inflection?**
    *(Rigorous) (Skill 2.5)*

    A.  Doris's shawl
    B.  Mother's-in-law frown
    C.  Children's lunches
    D.  Embassador's briefcase

**Answer: B. Mother's-in-law frown**
Mother-in-Law is a compound common noun and the inflection should be at the end of the word, according to the rule.

7.  **Which of the following sentences contains a subject-verb agreement error?**
    *(Average) (Skill 2.5)*

    A.  Both mother and her two sisters were married in a triple ceremony.
    B.  Neither the hen nor the rooster is likely to be served for dinner.
    C.  My boss, as well as the company's two personnel directors, have been to Spain.
    D.  Amanda and the twins are late again.

**Answer: C. My boss, as well as the company's two personnel directors, have been to Spain.**
The true subject of the verb is "My boss" not "two personnel directors" so the verb "to be" should be conjugated as "has", not "have".

**8.    What is the plural of the word _rose_?**
**(Easy) (Skill 2.5)**

A.    Rosis
B.    Rosses
C.    Roses
D.    Rose's

**Answer: C. Roses**
When making a word that ends in _e_ plural, add an _s_.

**9.    The following words are made plural correctly EXCEPT:**
**(Rigorous) (Skill 2.5)**

A.    Radios
B.    Bananas
C.    Poppies
D.    Tomatos

**Answer: D. Tomatos**
Words that end in _o_ with a consonant before it require adding an _es_ for the plural form. Radio does not have a consonant before the _o_ and therefore only takes the _s_ ending to avoid three vowels in a row.

**10.    Which of the following sentences is properly punctuated?**
**(Easy) (Skill 2.6)**

A.    The more you eat; the more you want.
B.    The authors—John Steinbeck, Ernest Hemingway, and William Faulkner—are staples of modern writing in American literature textbooks.
C.    Handling a wild horse, takes a great deal of skill and patience.
D.    The man who replaced our teacher, is a comedian.

**Answer: B. The authors—John Steinbeck, Ernest Hemingway, and William Faulkner—are staples of modern writing in American literature textbook.**
Dashes should be used instead of commas when commas are used elsewhere in the sentence for amplification or explanation—here within the dashes.

**11. Which of the following sentences contains a capitalization error?**
*(Average) (Skill 2.6)*

A. The commander of the English navy was Admiral Nelson.
B. Napoleon was the president of the French First Republic.
C. Queen Elizabeth II is the Monarch of the British Empire.
D. William the Conqueror led the Normans to victory over the British.

**Answer: C. Queen Elizabeth II is the Monarch of the British Empire.**
Words that represent titles and offices are not capitalized unless used with a proper name.

**12. Which sentence is NOT punctuated correctly?**
*(Rigorous) (Skill 2.6)*

A. The more he knew about her, the less he wished he had known.
B. Ellen daydreamed about getting out of the rain, taking a shower and eating a hot dinner.
C. The veterinarian, not his assistant, would perform the delicate surgery.
D. His thorough, though esoteric, scientific research could not easily be understood by high school students.

**Answer: B. Ellen daydreamed about getting out of the rain, taking a shower and eating a hot dinner.**
Choice B is incorrectly punctuated because the three phrases are not all separated by a comma. The rule is to separate three or more nouns, phrases, or clauses in a list by commas. The correct punctuation would be "…getting out of the rain, taking a shower, and eating a hot dinner."

**13. Which of the following is NOT a characteristic of a fable?**
*(Average) (Skill 3.1)*

A. Animals that feel and talk like humans
B. Happy solutions to human dilemmas
C. Teaches a moral or standard for behavior
D. Illustrates specific peoples or groups without directly naming them

**Answer: D. Illustrates specific people or groups without directly naming them**
A fable is a short tale with animals, humans, gods, or even inanimate objects as characters. Fables often conclude with a moral, delivered in the form of an epigram (a short, witty, and ingenious statement in verse). Fables are among the oldest forms of writing in human history. The most famous fables are those of Aesop, a Greek slave living in about 600 BCE.

14.  **Which is an untrue statement about a theme in literature?**
     *(Average) (Skill 3.3)*

     A.    The theme is always stated directly somewhere in the text
     B.    The theme is the central idea in a literary work
     C.    All parts of the work (plot, setting, mood) should contribute to the theme in some way
     D.    By analyzing the various elements of the work, the reader should be able to arrive at an indirectly stated theme

**Answer: A. The theme is always stated directly somewhere in the text**
The theme may be stated directly, but it can also be implicit in various aspects of the work, such as the interaction between characters, symbolism, or description.

15.  **Which of the following is considered a nontraditional literary form?**
     *(Easy) (Skill 3.6)*

     A.    Editorial cartoon
     B.    Poem
     C.    Speech
     D.    Play

**Answer: A. Editorial cartoon**
An editorial cartoon is a symbolic drawing that comically represents the author's ideas. These types of cartoons are usually humorous with a satirical attitude. Editorial cartoons can play a significant role in the discussion of many social topics. Use of editorial cartoons is an excellent way for students to identify the author's point of view.

16.  **An example of something that is not a primary source is:**
     *(Average) (Skill 4.2)*

     A.    The published correspondence between Winston Churchill and Franklin D. Roosevelt during World War II
     B.    Martin Gilbert's biography of Winston Churchill
     C.    The diary of Field Marshall Sir Alan Brooke, the head of the British Army during World War II
     D.    Franklin D. Roosevelt's handwritten notes from the World War II era

**Answer: B. Martin Gilbert's biography of Winston Churchill**
Martin Gilbert's biography of Winston Churchill is a secondary source because it was not written by Churchill himself. The Churchill-Roosevelt correspondence, Brooke's diary, and FDR's handwritten notes are all primary source documents written by actual historical figures.

17. **Which of the following is NOT an accurate statement?**
    *(Rigorous) (Skill 4.2)*

    A.      Direct quotes should be enclosed in quotation marks and the source should be cited
    B.      You should cite a source for any information that is not common knowledge
    C.      You should keep a records of all sources consulted during the research process
    D.      Summarizing someone else's wording and putting it into your own words is always a safe way to avoid plagiarism

**Answer: D. Summarizing someone else's wording and putting it into your owns words is always a safe way to avoid plagiarism**
As you take notes from someone else's writing you have to be very careful to avoid unintentional plagiarism. Make sure you are not simply rearranging their sentences or omitting key words they use. You must really be re-expressing the work in your own, unique and original way.

18. **Which of the following can be potential penalties for plagiarism and copyright violation?**
    *(Average) (Skill 4.3)*

    A.      Failing an assignment or losing credit for an entire course
    B.      Civil or criminal penalties
    C.      Expulsion from a learning environment
    D.      All of the above

**Answer: D. All of the above**
Plagiarism and copyright violation are both serious matters. Increasingly, the consequences for violating these rules are becoming more severe and range from the simple failing of an assignment to civil or criminal penalties for egregious violations of the rights of a copyright holder.

**SOCIAL SCIENCE**

19. **Government ultimately began as a form of:**
   *(Easy) (Skill 5.1)*

   A.    Laws
   B.    Censorship
   C.    Protection
   D.    Liberty

**Answer: C. Protection**
Government ultimately began as a form of protection. A strong person, usually one of the best warriors or someone who had the support of many strong men, assumed command of a people or a city or a land.

20. **Which of the following are powers delegated solely to the federal government?**
   *(Rigorous) (Skill 5.2)*

   A.    Grant patents, establish courts, borrow money
   B.    To tax, establish courts, declare war
   C.    Regulate intrastate trade, declare war, protect life and property
   D.    Conduct foreign affairs, conduct elections, to tax

**Answer: B. To tax, establish courts, declare war**
Only the federal government has the power to do all three; i.e. tax, establish courts, and declare war. Choices A, B, and C are various powers that are shared between federal, state, and local governments.

21. **Which one of the three branches of government has the power to impeach the President of the United States?**
   *(Easy) (Skill 5.3)*

   A.    Judicial
   B.    Executive
   C.    Legislative
   D.    All of the above

**Answer: C. Legislative**
The Congress also has the power to change the Constitution itself, and to *impeach* (bring charges against) the President. Charges for impeachment are brought by the House of Representatives and are then tried in the Senate.

22. **Which of the following lists elements usually considered to be responsibilities of citizenship under the American system of government?** *(Average) (Skill 5.4)*

   A.   Serving in public office, voluntary government service, military duty
   B.   Paying taxes, jury duty, upholding the Constitution
   C.   Maintaining a job, giving to charity, turning in fugitives
   D.   Quartering of soldiers, bearing arms, government service

**Answer: B. Paying taxes, jury duty, upholding the Constitution**
Only paying taxes, jury duty, and upholding the Constitution are responsibilities of citizens as a result of rights and commitments outlined in the Constitution—for example, the right of citizens to a jury trial in the Sixth and Seventh Amendments and the right of the federal government to collect taxes in Article 1, Section 8. Choice A, serving in public office, voluntary government service, military duty, and choice C, maintaining a job, giving to charity, and turning in fugitives, contain highly admirable actions undertaken by many exemplary citizens, but they are considered purely voluntary actions, even when officially recognized and compensated. The United States has none of the compulsory military or civil service requirements of many other countries. Choice D, the quartering of soldiers, is an act, which, according to Amendment III of the Bill of Rights, requires a citizen's consent. Bearing arms is a right guaranteed under Amendment II of the Bill of Rights.

23. **When consumers buy the goods and services that give them the most satisfaction, this is an example of:** *(Average) (Skill 6.1)*

   A.   Consumer sovereignty
   B.   Utility
   C.   Medium of exchange
   D.   Price

**Answer: B. Utility**
Consumer economics refers to how consumers make their decisions and the role that consumer decision-making plays in a capitalist economy. Consumers buy the goods and services that give them satisfaction, or utility. They want to obtain the most utility they can for their dollar.

**24. Economics is defined as a study of:**
*(Rigorous) (Skill 6.2)*

A. How scarce resources are allocated to satisfy unlimited wants
B. Anything that is manufactured to be used in the production process
C. Anyone who sells his ability to produce goods and services
D. Decisions of buyers are equal to the selling decision of seller

**Answer: A. How scarce resources are allocated to satisfy unlimited wants**
Economics is defined as a study of how scarce resources are allocated to satisfy unlimited wants. Capital is anything that is manufactured to be used in the production process. Market equilibrium occurs where the buying decisions of buyers are equal to the selling decision of seller.

**25. Laissez-faire capitalism is based on:**
*(Easy) (Skill 6.3)*

A. Government ownership of the means of production
B. Custom and usually exists in less developed countries
C. The premise of no government intervention in the economy
D. None of the above

**Answer: C. The premise of no government intervention in the economy**
Laissez-faire capitalism is based on the premise of no government intervention in the economy. The market will eliminate any unemployment or inflation that occurs. Government needs only to provide the framework for the functioning of the economy and to protect private property.

**26. Capitalism and communism are alike in that they are both:**
*(Rigorous) (Skill 6.3)*

A. Organic systems
B. Political systems
C. Centrally planned systems
D. Economic systems

**Answer: D. Economic systems**
While economic and political systems (choice B) are often closely connected, capitalism and communism are primarily economic systems (choice D). Capitalism is a system of economics that allows the open market to determine the relative value of goods and services. Communism is an economic system where the market is planned by a central state. While communism is a (C) centrally planned system (choice C), this is not true of capitalism. Organic systems (choice A) are studied in biology, a natural science.

**27.  Globalization refers to which of the following:**
**(Rigorous) (Skill 6.4)**

A.      Exchange of money, information, and ideas
B.      Social and economic change
C.      Cultural assimilation
D.      All of the above

**Answer: D. All of the above**
Globalization refers to the complex of social, political, technological, and economic changes that result from increasing contact, communication, interaction, integration, and interdependence of peoples of disparate parts of the world. Globalization may be understood in terms of positive social and economic change, as in the case of a broadening of trade resulting in an increase in the standard of living for developing countries. Globalization may also be understood negatively in terms of the abusive treatment of developing countries in the interest of cultural or economic imperialism. These negative understandings generally point to cultural assimilation, plunder and profiteering, the destruction of the local culture and economy, and ecological indifference.

**28.  The fundamental characteristic of the U.S. economic system is:**
**(*Average*) (Skill 6.5)**

A.      The use of competition and markets
B.      Stocks and bonds
C.      Profit sharing
D.      Interest rates

**Answer: A. The use of competition and markets**
The fundamental characteristics of the U.S. economic system are the uses of competition and markets. The price of an input or output allocates that input or output to those who are willing and able to transact at the market price. Those who can transact at the market price or better are included in the market; those that can't or won't transact at the market price are excluded from the market.

29. **The term spatial organization refers to:**
    (*Average*) (*Skill 7.1*)

    A. Latitude and longitude lines
    B. The alignment of the stars
    C. How things are grouped in a given space
    D. The space between point A and point B

**Answer: C. How things are grouped in a given space**
Spatial organization is a description of how things are grouped in a given space. In geographical terms, this can describe people, places, and environments anywhere and everywhere on Earth. The most basic form of spatial organization for people is where they live.

30. **The process of putting the features of the Earth onto a flat surface is called:**
    (*Average*) (*Skill 7.2*)

    A. Distortion
    B. Projection
    C. Cartography
    D. Illustration

**Answer: B. Projection**
The process of putting the features of the Earth onto a flat surface is called projection. All maps are really map projections. It is impossible to reproduce exactly on a flat surface an object shaped like a sphere. In order to put the earth's features onto a map, they must be stretched in some way. This stretching is called distortion. Cartographers are called mapmakers.

31. **Vital statistics, social trends, and crude rates are all a part of a branch of Science of Statistics, which is concerned with the social well being of people. What is the name of this branch of Science?**
    (*Average*) (*Skill 7.3*)

    A. Cartography
    B. Sociology
    C. Demography
    D. Psychology

**Answer: C. Demography**
Demography is the branch of science of statistics most concerned with the social well being of people. Demographic tables may include: analysis of the population on the basis of age, parentage, physical condition, race, occupation, and civil position.

32. **A condition in which two organisms of different species are able to live in the same environment over an extended period of time without harming one another is called:**
    (*Rigorous*) (*Skill 7.5*)

    A.    Symbiosis
    B.    Biodiversity
    C.    Habitat
    D.    Ecosystem

**Answer: A. Symbiosis**
Symbiosis is a condition in which two organisms of different species are able to live in the same environment over an extended period of time without harming one another. In some cases, one species may benefit without harming the other. In other cases both species benefit.

33. **The practice of dividing time into a number of discrete periods or blocks of time is called:**
    (*Easy*) (*Skill 8.1*)

    A.    Eras
    B.    Chronological time
    C.    Periodization
    D.    Years

**Answer: C. Periodization**
The practice of dividing time into a number of discrete periods or blocks of time is called "periodization." Dividing time into segments facilitates understanding of changes that occur over time and identifying similarities of events, knowledge, and experience within the defined period.

34. **This country is considered by some historians to be the oldest, uninterrupted civilization in the world.**
    (*Easy*) (*Skill 8.2*)

    A.    Japan
    B.    China
    C.    Canada
    D.    Mexico

**Answer: B. China**
China is considered by some historians to be the oldest, uninterrupted civilization in the world and was in existence around the same time as the ancient civilizations founded in Egypt, Mesopotamia, and the Indus Valley.

**35. The Agricultural Revolution was initiated by the invention of the:**
*(Easy) (Skill 8.3)*

A. Typewriter
B. iPod
C. Telephone
D. Plow

**Answer: D. Plow**
The Agricultural Revolution was initiated by the invention of the plow, which in turn led to a thoroughgoing transformation of human society by making large-scale agricultural production possible and facilitating the development of agrarian societies. During the period during which the plow was invented, the wheel, numbers, and writing were also invented.

**36. The Polish-born astronomer _____ began the Scientific Revolution, stating that the Sun, not the Earth, was the center of a solar system and that other planets revolved around the Sun, not the Earth.**
*(Rigorous) (Skill 8.3)*

A. Nicolaus Copernicus
B. Galileo Galilei
C. Isaac Newton
D. Tycho Brahe

**Answer: A. Nicolaus Copernicus**
Polish astronomer Nicolaus Copernicus began the Scientific Revolution. He crystallized a lifetime of observations into a book that was published about the time of his death; in this book, Copernicus argued that the Sun, not the Earth, was the center of a solar system and that other planets revolved around the Sun, not the Earth.

**37. The end of the feudal manorial system was caused by:**
*(Average) (Skill 8.3)*

A. The Civil War
B. The Black Death
C. The Christian Riots
D. Westward Expansion

**Answer: B. The Black Death**
The end of the feudal manorial system was sealed by the outbreak and spread of the infamous Black Death, which killed over one third of the total population of Europe.

**38.  The social results of the Industrial Revolution included:**
**(Average) (Skill 8.3)**

    A.      The emancipation of women
    B.      The decline of religion
    C.      Growth of great cities
    D.      All of the above

**Answer: D. All of the above**
The social results of the Industrial Revolution include:

- ⊙ Advances in science applied to agriculture, sanitation and medicine
- ⊙ Growth of great cities
- ⊙ The emancipation of women
- ⊙ The decline of religion
- ⊙ Rise of scientific materialism

**39.  Of all the major causes of both World Wars I and II, the most significant one is considered to be:**
**(Rigorous) (Skill 8.4)**

    A.      Extreme nationalism
    B.      Military buildup and aggression
    C.      Political unrest
    D.      Agreements and alliances

**Answer: A. Extreme nationalism**
In Europe, war broke out in 1914, eventually involving nearly 30 nations, and ended in 1918. One of the major causes of the war was the tremendous surge of nationalism during the 1800s and early 1900s. People of the same nationality or ethnic group sharing a common history, language, or culture began uniting or demanding the right of unification, especially in the empires of Eastern Europe, such as Russian Ottoman and Austrian-Hungarian Empires. Getting stronger and more intense were the beliefs of these peoples in loyalty to common political, social, and economic goals considered to be before any loyalty to the controlling nation or empire.

40. **World War II, which began September 1, 1939, and ended September 2, 1945, included a total of how many nations involved?**
    *(Rigorous) (Skill 8.4)*

    A.      8
    B.      92
    C.      17
    D.      59

**Answer: D. 59**
In all, 59 nations became embroiled in World War II, which began September 1, 1939 and ended September 2, 1945. These dates include both the European and Pacific Theaters of war. The horrible tragic results of this second global conflagration were more deaths and more destruction than in any other armed conflict.

41. ***Historic causation* is the concept that events in history are:**
    (*Easy) (Skill 8.5)*

    A.      The ordering of events through time
    B.      Linked to one another by an endless chain of cause and effect
    C.      Not mandated by time
    D.      None of the above

**Answer: B. Linked to one another by an endless chain of cause and effect**
Historic causation is the concept that events in history are linked to one another by and endless chain of cause and effect. The root causes of major historical events cannot always be seen immediately and are only apparent when looking back from many years later.

42. **_____ is the belief that one's own culture is the central and superior culture.**
    *(Average) (Skill 8.6)*

    A.      Ethnocentrism
    B.      Egocentric
    C.      Prejudice
    D.      Superiority

**Answer: A. Ethnocentrism**
Ethnocentrism, as the word suggests, is the belief that one's own culture is the central and usually superior culture. An ethnocentric view usually considers different practices in other cultures as inferior or even "savage."

43. **The belief that the United States should control all of North America was called:**
   (*Easy*) *(Skill 9.1)*

   A.   Westward Expansion
   B.   Pan Americanism
   C.   Manifest Destiny
   D.   Nationalism

**Answer: C. Manifest Destiny**

The belief that the United States should control all of North America was called Manifest Destiny. This idea fueled much of the violence and aggression towards those already occupying the lands such as the Native Americans. Manifest Destiny was certainly driven by sentiments of nationalism (choice D) and gave rise to westward expansion (choice A).

44. **The area of the United States was effectively doubled through purchase of the Louisiana Territory under which President?**
   (*Average*) *(Skill 9.1)*

   A.   John Adams
   B.   Thomas Jefferson
   C.   James Madison
   D.   James Monroe

**Answer: B. Thomas Jefferson**

The Louisiana Purchase, an acquisition of territory from France in 1803, occurred under Thomas Jefferson. Choice A John Adams (1735–1826) was president from 1797–1801, before the purchase, and choice C James Madison (1751–1836) was President after the Purchase (1809–1817). Choice D James Monroe (1758–1831) was actually a signatory on the Purchase but also did not become President until 1817.

**45. Which if the following wars have been called "the first modern war"?**
(*Average*) (*Skill 9.1*)

A. War of 1812
B. Civil War
C. Spanish-American War
D. Revolutionary War

**Answer: B. Civil War**
The effects of the Civil War were tremendous. It changed the methods of waging war and has been called the first modern war. It introduced weapons and tactics that, when improved later, were used extensively in wars of the late 1800s and 1900s. Civil War soldiers were the first to fight in trenches, first to fight under a unified command, and first to wage a defense called "major cordon defense," a strategy of advance on all fronts. They were also the first to use repeating and breech loading weapons.

**46. Jim Crow laws dealt with:**
(*Average*) (*Skill 9.1*)

A. Minority rights
B. Animal control
C. Segregation
D. Adoption

**Answer: C. Segregation**
The Jim Crow laws varied from state to state, but the most significant of them required separate school systems and libraries for blacks and whites and separate ticket windows, waiting rooms, and seating areas on trains and, later, other public transportation. Restaurant owners were permitted or sometimes required to provide separate entrances, tables, and counters for blacks and whites, so that the two races not see one another while dining. Public parks and playgrounds were constructed for each race. Landlords were not allowed to mix black and white tenants in apartment houses in some states.

47. **Which President made this now famous remark in his Inauguration Speech? "Ask not what your country can do for you—ask what you can do for your country."**
    (*Rigorous*) (*Skill 9.1*)

    A. Eisenhower
    B. Reagan
    C. Lincoln
    D. Kennedy

**Answer: D. Kennedy**
John F. Kennedy is widely remembered for his inaugural address in which the statement was made, "Ask not what your country can do for you—ask what you can do for your country." His campaign pledge was to get America moving again. During his brief presidency, his economic programs created the longest period of continuous expansion in the country since WWII. He wanted the U.S. to again take up the mission as the first country committed to the revolution of human rights.

48. **Prior to becoming an official part of the United States, Oregon was an international territory shared with what country?**
    (*Rigorous*) (*Skill 9.5*)

    A. France
    B. Spain
    C. Britain
    D. Mexico

**Answer: C. Britain**
Prior to becoming an official part of the United States, Oregon was an international territory shared with the British. When the U.S. and Britain went to war in 1812, the permanent Oregon residents at Fort Clatsop had a unique perspective. While they were sponsored by an American, John Jacob Astor, and worked for his American fur company, many of the men were British. Their solution was to keep an American and British flag handy, intending to fly whichever one was being flown by a visiting ship.

**49. Analyzing an event or issue from multiple perspectives involves which of the following?**
*(Rigorous) (Skill 10.3)*

A. Seeking out sources that advocate the perspective
B. Comparing sources with one another
C. Understanding the bias of each perspective
D. All of the above

**Answer: D. All of the above**
Identifying and analyzing these social and historic links is a primary goal of the social sciences. The methods used to analyze social phenomena borrow from several of the social sciences. Interviews, statistical evaluation, observation, and experimentation are just some of the ways that people's opinions and motivations can be measured.

**50. Which of these methods can be used to analyze social phenomena in their relation to historical events?**
*(Rigorous) (Skill 10.4)*

A. Interviews
B. Statistical evaluations
C. Observation and experimentation
D. All of the above

**Answer: D. All of the above**
Historic events and social issues cannot be considered only in isolation. Identifying and analyzing these social and historic links is a primary goal of the social sciences. The methods used to analyze social phenomena borrow from several of the social sciences. Interviews, statistical evaluation, observation, and experimentation are just some of the ways that people's opinions and motivations can be measured.

**ARTS**

**51. Which of the following is an example of a student applying his skills to visual art?**
**(*Average*) (*Skill 11.1*)**

A. Selecting a medium for a work based on an experience
B. Working with others to plan and produce a group project
C. Using primary colors to paint a picture from nature
D. All of the above

**Answer: D. All of the above**
Teachers can help students learn the characteristics of the visual arts by using a wide range of subject matter, symbols, meaningful images, and visual expressions, to reflect their ideas, feelings, and emotions and to evaluate the merits of their efforts. Some evident examples in the classroom could possibly include, but are not limited to, the following: make a ceramic design which they decorate with symbols, make a drawing with three-dimensional space, selecting a medium for a work based on an experience working with others to plan, and produce a group project, using primary colors to paint a picture from nature.

**52. The visual arts can include the following:**
**(*Average*) (*Skill 11.2*)**

A. Architecture
B. Painting
C. Mosaic
D. All of the above

**Answer: D. All of the above**
The visual arts are extremely rich. They range from drawing, painting, mosaic, sculpture, and design, to architecture, film, video, and folk arts.

**53.** **The 18th century is referred to as the:**
**(Rigorous) (Skill 11.3)**

    A.     Age of Enlightenment
    B.     Age of Modernism
    C.     Age of Social Art
    D.     Age of History

**Answer: A. Age of Enlightenment**
The 18th century is referred to as the Age of Enlightenment with artistic renderings of the physical universe as well as politically revolutionary visions. The late 19th century saw numerous artistic movements such as Symbolism and Impressionism, which were torn down by the search for new standards and did not last much past the time of their invention. In the later 20th century came Modernism, or the search for truth, which later led to the period of Contemporary Art.

**54.** **_____ is an artistic form of self expression that uses the various elements of dance such as use of space, time, levels, and force.**
**(Easy) (Skill 12.2)**

    A.     Rock-climbing
    B.     Skiing
    C.     Dance
    D.     Swimming

**Answer: C. Dance**
Dance is an artistic form of self-expression that uses the various elements of:

- The *range* of movement or gestures through space
- The *direction* of the action or imaginary lines the body flows through space
- Articulation of isolated body parts requires dancers to moves only selected body parts (arms and legs) while mastering other movements at the same time
- Dancers must be able to control weight shift during specific movements that may require physical strength and control of a variety of muscles

55. **The history of theatre can be dated back to:**
    *(Rigorous) (Skill 12.3)*

    A.      Late 6th century in Greece
    B.      Early 9th century in Italy
    C.      Early 6th century in Greece
    D.      Late 9th century in Italy

**Answer: C. Early 6th century in Greece**
The history of theatre can be dated back to early sixth century B.C. in Greece. The Greek theatre was the earliest known theater experience. Drama was expressed in many Greek spiritual ceremonies.

56. **Drama was expressed in many Greek spiritual ceremonies. Name the two main forms of dramatic forms.**
    *(Rigorous) (Skill 12.3)*

    A.      Comedy and realism
    B.      Tragedy and comedy
    C.      Realism and drama
    D.      Comedy and drama

**Answer: B. Tragedy and comedy**
Drama was expressed in many Greek spiritual ceremonies. There are two main forms of dramatic forms that have both evolved in their own time.

- Tragedy - typically conflict between characters.
- Comedy - typically paradoxical relationships between humans and the unknown gods such as Sophocles and Euripides. Comedies and tragedies were seldom mixed by playwrights. Plays such as these were designed to entertain, contained little violence, and were based on knowledge and the teachings of Aristotle.

57. **Which of the following are *styles* of dance?**
    *(Easy)(Skill 12.4)*

    A.    Creative
    B.    Modern
    C.    Ritual
    D.    All of the above

**Answer: D. All of the above**
There are many types of dance. Here are a few:
- ⊙ Creative dance is the one that is most natural to a young child. Creative dance depicts feelings through movement. It is the initial reaction to sound and movement. Isadora Duncan is credited with being the mother of modern dance.
- ⊙ Modern dance today refers to a concept of dance where the expressions of opposites are developed such as fast-slow, contract-release, vary height and level to fall and recover. Modern dance is based on four principles, which are substance, dynamism, metakinesis, and form.
- ⊙ Ritual dance are often of a religious nature that celebrate a significant life event such as a harvest season, the rain season, glorifying the gods, asking for favors in hunting, birth and death dances.

58. **A combination of three or more tones sounded at the same time is called a:**
    **(*Rigorous*) (Skill 13.1)**

    A.    Harmony
    B.    Consonance
    C.    A chord
    D.    Dissonance

**Answer: C. A chord**
A chord consists of three or more notes or pitches being played simultaneously and is created by the combination of notes making intervals. A chord is the harmonic function of a group of notes, but it is unnecessary for all the notes to be played together. For example, "broken chords" or "arpeggios" are ways of playing notes in succession.

59. **Most Western music is based on which type of rhythm?**
    (*Rigorous*) *(Skill 13.1)*

    A.    Additive
    B.    Divisive
    C.    Modern
    D.    Classical

**Answer: B. Divisive**
In music, a divisive rhythm is when a larger period of time is divided into smaller units. Additive rhythms are when larger periods of time are made from smaller units of time added to a previous unit. Most Western music is based on **divisive** rhythm, while non-Western music uses more **additive** rhythm.

60. **Which of the following are characteristic of a ballad?**
    (*Average*) *(Skill 13.2)*

    A.    Interaction between the singer and listener, in which the listener sings a response to the singer
    B.    Contains a story and has simple, repeating rhymes that are sung at regular intervals throughout the song
    C.    An emphasis on rhythm and the use of percussion and amplified instruments like bass and guitar
    D.    An absence of lyrics; instrumental in nature

**Answer: B. Contains a story and has simple, repeating rhymes that are sung at regular intervals throughout the song**
Ballads are songs that contain a story. Any story form can be a ballad, such as fairy tales or historical accounts. Ballads usually have simple repeating rhymes and often contain a refrain (or repeating sections) that are played or sung at regular intervals throughout the song.

61. **Jazz is a form of music that grew out of which influences?**
    (*Average*) *(Skill 13.2)*

    A.    Baroque music
    B.    Rock and roll and folk music
    C.    Classical music
    D.    Folk music, ragtime, and band music

**Answer: D. Folk music, ragtime, and band music**
Jazz is a form of music that grew out of a combination of folk music, ragtime, and band music. It has been called the first native art form to develop in the United States.

62. **For students, an education in the arts provides:**
    (*Average) (Skill 13.4)*

    A.      The ability to be creative and inventive decision-makers
    B.      An increased ability to achieve across the curriculum
    C.      Increased potential for life success
    D.      All of the above

**Answer: D. All of the above**
The education of our students in the disciplines of dance, music, theater, and visual art is critical to their personal success and to the success of all students. The arts offer tools for development. They enable personal, intellectual, and social development for each individual.

## READING INSTRUCTION

63. **The major difference between phonemic and phonological awareness is:**
    (*Rigorous) (Skill 14.1, 14.2)*

    A.      One deals with a series of discrete sounds and sound spelling relationships
    B.      One is involved with teaching and learning alliteration and rhymes
    C.      Phonemic awareness is a specific type phonological awareness that deals with separate phonemes within a given word
    D.      Phonological awareness is associated with printed words

**Answer: A. One deals with a series of discrete sounds and sound spelling relationships.**
Phonological awareness means the ability of the reader to recognize the sound of a spoken language.  This recognition includes how these sounds can be blended together, segmented, and manipulated.  Phonemic awareness is the idea that words are comprised of sounds meaning that the reader and listener can recognize and manipulate specific sounds in spoken words.

64. **"Beautiful Beth is the Best Girl in the Bradley Bay area." This sentence could be used to help children learn about:**
    (*Easy) (Skill 14.3)*

    A.    Assonance
    B.    Alliteration
    C.    Rhyming pairs
    D.    None of the above

**Answer: B. Alliteration**
Instructional methods to teach phonological awareness may include sharing books with children that use alliteration (words that all begin with the same sound) such as Avalanche, A to Z.

65. **All of the following are true about phonological awareness EXCEPT:**
    (*Rigorous) (Skill 14.3)*

    A.    It may involve print
    B.    It is a prerequisite for spelling and phonics
    C.    Activities can be done by the children with their eyes closed
    D.    Starts before letter recognition is taught

**Answer: A. It may involve print**
It does not involve print. It must start before children have learned letter-sound correlations. It is the basis for the successful teaching of phonics and spelling. Activities can and may be done with the children's eyes closed. (Teachers should always keep their eyes open!!) Must be in place before the alphabetic principle can be taught.

66. **To decode is to:**
    (*Average) (Skill 15.1)*

    A.    Change communication signals into messages
    B.    Sound out a printed sequence of letters
    C.    Use a special code to decipher a message
    D.    None of the above

**Answer: A. Change communication signals into messages**
To decode means to change communication signals into messages. Reading comprehension requires that the reader learn the code within which a message is written and be able to decode it to get the message.

**67. Randy is proud of how many new vocabulary words he has learned. He enjoys playing with a device his teacher has, since it helps him to show all the words he can create from various letters. The device is a:**
*(Average) (Skill 15.2)*

A.      Word strip
B.      Letter holder for making words
C.      Word mask
D.      None of the above

**Answer: B. Letter holder for making words**
Use a 2" x 3" piece of foam board to make a letter holder. On the front of the board, attach 16 library pockets, one for each letter from A to P. Use the back of the board to attach another 10 pockets for the rest of the alphabet. Through use of this letter holder, children can experience how letters can be rearranged, added, or removed to make new words. They can use these cards also to focus as needed on letter sequences and to support them in recognizing spelling patterns in words.

**68. Which of the following is true about sight words?**
**(*Average*) (Skill 15.5)**

A.      Do not sound like their spellings might suggest
B.      Usually not decodable
C.      Must be memorized
D.      All of The above

**Answer: D. All of the above**
Sight words are an essential component of good reading. Many of these words do not sound like their spellings might suggest, so sounding them out would be unproductive. Sight words are usually not decodable and must be memorized by the student in the earliest years of school. Sight words are words that good readers should be able to instantly recognize without having to sound them out.

**69. Contextual Redefinition supports children to use the context more effectively by presenting them with sufficient context _____ they read.**
(*Rigorous) (Skill 15.6)*

A. While
B. During
C. Before
D. None of the above

**Answer: C. Before**
Contextual Redefinition is a strategy that supports children to use the context more effectively by presenting them with sufficient context BEFORE they begin reading. It models for the children the use of contextual clues to make informed guesses about word meanings.

**70. To encode means that you:**
(*Easy) (Skill 15.7)*

A. Decode a second time
B. Change a message into symbols
C. Tell someone a message
D. None of the above

**Answer: B. Change a message into symbols**
Encoding involves changing a message into symbols. For example to encode oral language into writing (spelling) or to encode an idea into words or to encode a mathematical or physical idea into appropriate mathematical symbols.

**71. Ascribing meaning to text refers to:**
(*Rigorous) (Skill 15.7)*

A. Comprehension
B. Word analysis
C. Word recognition
D. Knowledge

**Answer: A. Comprehension**
Comprehension simply means that the reader can ascribe meaning to text. Word analysis (a.k.a. phonics or decoding) is the process readers use to figure out unfamiliar words based on written patterns. Word recognition is the process of automatically determining the pronunciation and some degree of the meaning of an unknown word.

72. **Which of the following can students use to help determine the meaning of an unfamiliar word?**
    *(Average) (Skill 16.1)*

    A.  Root words
    B.  Antonyms
    C.  Word forms
    D.  All of the above

**Answer: D. All of the above**
Word meanings in context are definitions that you determine based on information from the surrounding text, such as other words, phrases, sentences, and/or paragraphs. You can use words you already know to piece together possible meanings. You can use root words, antonyms, and word forms to help determine the meaning of an unfamiliar word.

73. **_____ are diagrams that help students see how words or concepts are related to one another.**
    (*Rigorous*) *(Skill 16.2)*

    A.  Word sorts
    B.  Word banks
    C.  Semantic maps
    D.  Read alouds

**Answer: C. Semantic maps**
Semantic maps are diagrams that help students see how words or concepts are related to one another. In most cases, semantic mapping begins with a brainstorming session in which students are encouraged to make associations to the main word or the concept presented.

74. **Words have denotative and connotative meanings. *Connotative* refers to:**
    (*Rigorous*) *(Skill 16.3)*

    A.  Mental suggestions that the words convey
    B.  The actual spelling of the word
    C.  The implied meaning of the word
    D.  The definition of the word

**Answer: A. Mental suggestions that the words convey**
To effectively teach language, it is necessary to understand that as human beings acquire language, they realize that words have denotative and connotative meanings. Generally, denotative words point to things and connotative words deal with mental suggestions that the words convey.

**75.** **Which of the following is true of expository texts?**
*(Average) (Skill 17.2)*

A. May or may not be factual
B. May reflect the bias of the author
C. May be found in newspapers
D. All of the above

**Answer: D. All of the above**
Expository texts are full of information which may or may not be factual and which may reflect the bias of the editor or author. Children need to learn that expository texts are organized around main ideas. They are usually found in newspapers, magazines, content textbooks, and informational reference books (i.e. atlas, almanac, yearbook, or an encyclopedia).

**76.** **The following clue words: "therefore," "as a result of," "because," "since," are a part of what type of text?**
*(Average) (Skill 17.2)*

A. Comparison text
B. Descriptive text
C. Causation text
D. Collection text

**Answer: C. Causation text**
Causation or Cause-Effect text is where faulty reasoning may come into play and the child reader has to use the inferential and self-questioning skills already mentioned to help assess whether the stated cause-effect relationship is a valid and correct one. Clue words, which the reader must note and then decide whether or not the evidence available or presented in the excerpt is sufficient, are: "therefore," "the reasons for," "as a result of," "because," "in consequence of," and "since."

**77.** **An example of a collection text would be:**
(*Average) (Skill 17.2)*

A. Newspaper article
B. Recipe
C. Essay paper
D. Homework assignment

**Answer: B. Recipe**
A collection text presents ideas in a group. The writer's goal is to present a set of related points or ideas. Another name for this structure of expository writing is a listing or a sequence. Simple collection texts that can be literally modeled for young children include recipe making.

78. **Which of the following is a type of expository texts?**
    (*Average*) (*Skill 17.2*)

    A. Cause-Effect text
    B. Collection text
    C. Response text
    D. All of the above

**Answer: D. All of the above**
The five types of expository texts to which the children should be introduced to through modeled reading and a teacher-facilitated walkthrough. These are:

⊙ Descriptive text
⊙ Causation or Cause-Effect text
⊙ Comparison text
⊙ Collection text
⊙ Response text

79. **_____ is an evaluative process that involves the reader making a reasonable judgment based on the information given.**
    (*Average*) (*Skill 18.1*)

    A. Comparison
    B. Inference
    C. Evaluation
    D. Description

**Answer: B. Inference**
Inferencing is an evaluative process that involves the reader making a reasonable judgment based on the information given and engages children in literally constructing meaning. In order to develop and enhance this key skill in children, they might have a mini-lesson where the teacher demonstrates this key skill by reading an expository book aloud (i.e. one on skyscrapers for young children) and then demonstrates for them the following reading habits: looking for clues, reflecting on what the reader already knows about the topic ("activating prior knowledge" in teacher's jargon), and using the clues in the expository text to figure out what the author means/intends.

**80.  Cognitive learning theories suggest that learning takes place:**
**(*Easy*) (Skill 18.2)**

A.      By writing a paper
B.      In the mind
C.      By reading a book
D.      By memorizing words

**Answer: B. In the mind**
Cognitive learning theories suggest that learning takes place in the mind and that the mind processes ideas through brain mapping and connections with other material and experiences. In other words, with behaviorism, learning is somewhat external. We see something, for example, and then we copy it. With cognitive theories, learning is internal. For example, we see something, analyze it in our minds, and make sense of it for ourselves.

**81.  Behavioral learning theory suggests that people:**
**(*Average*) (Skill 18.2)**

A.      Learn socially
B.      Learn through stimulation
C.      Learn through repetition
D.      All of the above

**Answer: D. All of the above**
Behavioral learning theory suggests that people learn socially or through some sort of stimulation or repetition. For example, when we touch a hot stove, we learn not to do that again. Or, when we make a social error and are made fun of for it, we learn proper social conventions. Or, we learn to produce something by watching someone do the same thing.

**82.  Most educators believe that children learn:**
**(*Rigorous*) (Skill 18.2)**

A.      Cognitively
B.      Behaviorally
C.      Physically
D.      Emotionally

**Answer: A. Cognitively**
Today, even though behavioral theories exist, most educators believe that children learn cognitively. So, for example, when teachers introduce new topics by relating those topics to information students are already familiar with or exposed to, they are expecting that students will be able to better integrate new information into their memories by attaching it to something that is already there.

83. **Cause and Effect writing usually explains the _____ of the text.**
    (*Rigorous*) *(Skill 18.3)*

    A.    Who and when
    B.    When and why
    C.    Why and what
    D.    Who and why

**Answer: C. Why and what**
When writing about why things happen, as well as what happens, authors commonly use the cause and effect structure. For example, when writing about how he became so successful, a CEO might talk about how he excelled in math in high school, moved to New York after college, and stuck to his goals even after multiple failures. These are all causes that lead to the effect, or result, of him becoming a wealthy and powerful businessman.

84. **A K-W-L chart is which of the following?**
    (*Average*) *(Skill 18.4)*

    A.    Graphic organizer
    B.    Abbreviations chart
    C.    Word list
    D.    Venn diagram

**Answer: A. Graphic organizer**
K-W-L is a graphic organizer strategy that activates children's prior knowledge and also helps them to target their reading of expository texts. This focus is achieved through having the children reflect on three key questions.

Before a child reads the expository passage, they should ask:
"What do I know?" and "What do I or we want to find out?"

After a child has read the expository passage, they should ask:
"What have I or we learned from the passage?" and "What do I or we still want to learn?"

85. **K-W-L charts are useful for which of the following?**
    *(Easy) (Skill 18.4)*

    A.      Comprehension of expository text
    B.      Format for note taking
    C.      Report writing
    D.      All of the above

**Answer: D. all of the above**
K-W-L is useful and can even be introduced as early as grade 2 with extensive teacher discussion support. It not only serves to support the child's comprehension of a particular expository text but also models for children a format for note taking. Beyond note taking, when the teacher wants to introduce report writing, the K-W-L format provides excellent outlines and question introductions for at least three paragraphs of a report.

86. **Which of the following is an excellent source for a ELL student to develop their expository skills?**
    *(Rigorous) (Skill 18.5)*

    A.      Reading a newspaper
    B.      Writing a poem
    C.      Giving a speech
    D.      Acting in a play

**Answer: A. Reading a newspaper**
If the teacher has time to work individually with the English Language Learner child, the day's daily newspaper, which is replete with graphics, photos, and text, is a wonderful tool for honing expository reading skills.

87. **What is a good method for Special Needs learners to learn to identify various points of view?**
    *(Rigorous) (Skill 18.5)*

    A.      Draw a picture
    B.      Watch a movie
    C.      Read a poem
    D.      Read a cartoon

**Answer: D. Read a cartoon**
Use of editorial sports page cartoons is a good way to access Special Needs learners to opportunities for identifying point of view. They can also create their own takes on the topics of the editorial cartoons using an accessible, non-threatening storyboard format for their commentary.

**Constructed Response Sample Question: Language Arts**

**SAMPLE ESSAY QUESTION**

**Read the passage below from *The Diary of Anne Frank* (1947); then complete the exercise that follows.**

Written on July 15, 1944, three weeks before the Frank family was arrested by the Nazis, Anne's diary entry explains her worldview and future hopes.

*It's difficult in times like these: ideals, dreams and cherished hopes rise within us, only to be crushed by grim reality. It's a wonder I haven't abandoned all my ideals, they seem so absurd and impractical. Yet I cling to them because I still believe, in spite of everything, that people are truly good at heart.*

*It's utterly impossible for me to build my life on a foundation of chaos, suffering and death. I see the world being slowly transformed into a wilderness, I hear the approaching thunder that, one day, will destroy us too, I feel the suffering of millions, And yet, when I look up at the sky, I somehow feel that everything will change for the better, that this cruelty too shall end, that peace and tranquility will return once more. In the meantime, I must hold on to my ideals. Perhaps the day will come when I will be able to realize them!*

Using your knowledge of literature, write a response in which you:

- ⊙ Compare and contrast Anne's ideals with her awareness of the conditions in which she lives
- ⊙ Discuss how the structure of Anne's writing—her sentences and paragraphs—emphasize the above contrast

**SAMPLE RESPONSE**

This excerpt from *The Diary of Anne Frank* reveals the inner strength of a young girl who refuses, despite the wartime violence and danger surrounding her, to let her idealism be overcome by hatred and mass killing. This idealism is reflected, in part, by her emphases on universal human hopes such as peace, tranquility, and goodwill. But Anne Frank is no dreamy Pollyanna. Reflecting on her idealism in the context of the war raging around her, she matter-of-factly writes: "my dreams, they seem so absurd and impractical."

This indicates Anne Frank's awareness of not only her own predicament but of human miseries that extend beyond the immediate circumstances of her life. For elsewhere she writes in a similar vein, "In times like these… I see the world being slowly transformed into a wilderness"; despite her own suffering she can "feel the suffering of millions."

And yet Anne Frank believes, "in spite of everything, that people are truly good at heart." This statement epitomizes the stark existential contrast of her worldview with the wartime reality that ultimately claimed her life.

The statement also exemplifies how Anne's literary form—her syntax and diction—mirror thematic content and contrasts. "In spite of everything," she still believes in people. She can "hear the approaching thunder…yet, when I look up at the sky, I somehow feel that everything will change for the better." At numerous points in this diary entry, first-hand knowledge of violent tragedy stands side-by-side with belief in humanity and human progress.

"I must hold on to my ideals," Anne concludes. "Perhaps the day will come when I'll be able to realize them!" In her diary, she has done so and more.

**Constructed Response Sample Question: Social Science**

**SAMPLE ESSAY QUESTION**

You are a 5th grade teacher. The Reading/Language Arts curriculum used in your classroom dominates over half of the school day. The Math curriculum encompasses almost the other half of the school day. Because of the extreme importance placed on standardized tests, the resulting AIP and AYP scores, and how they affect the school's funding, the district has labeled items in the curriculums as "non-negotiable." These "non-negotiable" items leave very little room in the school day for Science and Social Studies curriculum.

The 6th grade teachers at the local middle school have voiced numerous concerns regarding how unprepared the incoming 6th graders are for Social Studies and Science and how they have to spend at least the first month of the school year teaching the students Social Studies and Science skills to be able to start the 6th grade curriculum. These teachers are frustrated and enraged that required state standards are being overlooked at the elementary school level leaving students unprepared for the middle school curriculum.

After meeting as a grade level, you have volunteered to create a plan for teaching Social Studies to the students. Knowing that you cannot eliminate any of the Language Arts and Math "non-negotiable" items, you can only find 30 minutes of time 1 day a week to teach Social Studies to your 5th graders.

Develop an instructional plan to teach Social Studies within the 30-minute time slot 1 day a week. Be sure to include specific objectives, goals, and activities for one unit of study.

**SAMPLE RESPONSE**

**Initial Steps**
To begin, I will research the 5th grade and 6th grade Social Studies state standards and create a list of common themes between the two grade levels. Given my time constraints in the classroom, I will then list these common themes in order of importance per subject to ensure that the most important standards are taught to my 5th grade students. After creating this list and sharing it with my fellow 5th grade teachers, I will meet with at least one 6th grade teacher at the local middle school to discuss the list and share my plan of action. I will continue to stay in contact with the 6th grade teachers throughout the year regarding our progress with the 5th grade Social Studies curriculum.

**Instructional Plan**
One common theme stated in the state standards between the two grade levels is for students to analyze the geographic, political, economic, religious, and social structures of a settlement or civilization. Being that the 5th grade teachers will only have 30 minutes once a week for Social Studies, we will give each month a theme using the above commonality in the standards (i.e. August: Geography of a settlement; September: Politics of a settlement; October: Economy of a settlement; November: Religion of a settlement; December: Society of a settlement). The remainder of the year's lessons (January through May) will focus on at least two of the components (e.g. Geography and Politics) until by the end of the year, the 5th graders are analyzing all 5 components and so will be prepared for that standard in 6th grade. The idea is to increase the higher learning/thinking skills by building upon prior knowledge and background information. Each month as a new theme is introduced; teachers will connect it to the prior month's theme until by the end of the year students are able to make connections among all 5 components of the standard.

Following is a detailed plan for August (theme: Geography of a settlement).

**Week 1:** Introduce important vocabulary to frontload the lesson. Divide the class into teams of 3-4 students (smaller teams if there are more vocabulary words) and assign each team 1 vocabulary word. On a piece of cardstock, each team will be responsible for defining the word, using the word in a sentence, creating an illustration for the word, and giving examples of the word. After all teams have completed this activity, they will share their word with the class. All of the pieces of cardstock containing the vocabulary information will be stapled together to create an Illustrated Dictionary and left on display in the classroom for reference.

**Week 2:** This week's activity will revolve around reading material from the textbook about the geography of a settlement. An instructional strategy that can be used during the reading is "Talk to the Text." As students read a copy of the text, they complete the following steps.

1. Box, circle, underline, or star difficult words
2. Draw arrows from nouns to pronouns (or between ideas) as the relationship becomes clear
3. Write brief notes in the margins near hard to understand sentences and paragraphs

This strategy is followed by a class discussion driven by teacher- and student-driven questions.

**Week 3:** This week can be similar to the previous week if there is more text that needs to be read and/or discussion that needs to be completed. If this is not the case, students will complete journal writing about what they've learned about this theme. The journal writing will include a description of the theme and how it relates to the specific settlement of study, predictions of how varying geographical features would affect other areas of settlement, and an explanation of what they would consider to be the ideal area in which to settle.

**Week 4:** This week's activity will serve as an assessment. This could be an assessment take from the textbook. Another idea for an assessment could be to have the students work in teams of 4 to create a settlement and outline how the geography and climate influences the way they adjust to the environment. This could include explanations, drawings, etc. to explain location of the settlement, structures built, and how food, clothing, etc. are obtained.

## ORELA Multiple Subjects 001, 002, 003 Sample Test

**MATH**

1.  **Which words in a test problem would indicate that an addition operation is needed?**
    *(Easy) (Skill 19.1)*

    A. Product
    B. Combine
    C. Difference
    D. Split into equal groups

2.  **Each *(x,y)* relationship between a pair of values is called the _____ and can be plotted on a graph.**
    *(Average) (Skill 19.3)*

    A. Coordinate pair
    B. Parallel value
    C. Symbolic rule
    D. Proportional function

3.  **Which of the following is the least common multiple of 20, 30, and 40?**
    *(Average) (Skill 20.1)*

    A. 40
    B. 20
    C. 120
    D. 80

4.  **Find the least common multiple of 27, 90, and 84.**
    *(Easy) (Skill 20.1)*

    A. 90
    B. 3,780
    C. 204,120
    D. 1,260

5.  **What is the greatest common factor of 16, 28, and 36?**
    *(Rigorous) (Skill 20.1)*

    A. 2
    B. 4
    C. 8
    D. 16

6.  **Which of the following is an example of scientific notation?**
    *(Average) (Skill 20.2)*

    A. $46,368,000 = 4.6368 \times 10^{7}$
    B. $400.0 = 400\%$
    C. $a + b = b + a$
    D. $\dfrac{3}{5} + \dfrac{2}{3} = \dfrac{3(3)}{3(5)} + \dfrac{5(2)}{5(3)} = \dfrac{9}{15} + \dfrac{10}{15} = \dfrac{19}{15}$

7.  **Which of the following is a part of mathematical questioning?**
    *(Easy) (Skill 21.4)*

    A. Eliminate possible solutions
    B. Devise questions to clarify the problem
    C. Identify the problem
    D. All of the above

8.  **The property rules apply to:**
    *(Easy) (Skill 22.3)*

    A. Addition and subtraction
    B. Multiplication and division
    C. Addition and multiplication
    D. Addition, subtraction, multiplication, and division

9. Evaluate: 1/3 – 1/2 + 1/6
   *(Average) (Skill 22.4)*

   A. 5/6
   B. 2/3
   C. 0
   D. 1

10. A teacher is introducing the concept of multiplication to her third grade students. Identify another way that they might write 4 x 5.
    *(Easy) (Skill 22.4)*

    A. 4 + 5
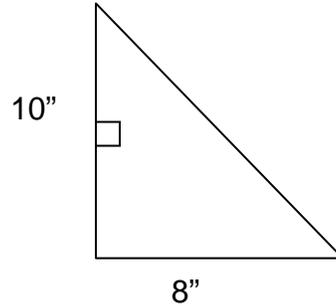    B. 5 + 4
    C. 4 + 4 + 4 + 4 + 4
    D. 5 + 5 + 5 + 5 + 5

11. A percent can be converted to a decimal by:
    *(Average) (Skill 22.4)*

    A. Dividing by 100
    B. Multiplying by 100
    C. Multiplying by 10
    D. Dividing by 10

12. The area of a _____ is found by the formula A = Πr2.
    *(Rigorous) (Skill 23.1)*

    A. square
    B. circle
    C. triangle
    D. hexagon

13. What is the area of this triangle?
    *(Rigorous) (Skill 23.1)*



    A. 80 square inches
    B. 20 square inches
    C. 40 square inches
    D. 30 square inches

14. 3 km is equivalent to:
    *(Rigorous) (Skill 23.1)*

    A. 300 cm
    B. 3000 m
    C. 3000 cm
    D. .300 m

15. The term "cubic feet" indicates which kind of measurement?
    *(Average) (Skill 23.1)*

    A. Volume
    B. Mass
    C. Length
    D. Distance

16. Find the surface area of a box that is 3 feet wide, 5 feet tall, and 4 feet deep.
    *(Easy) (Skill 23.1)*

    A. 47 square feet
    B. 60 square feet
    C. 94 square feet
    D. 188 square feet

17. **Find the height of a box with a surface area of 94 square feet, a width of 3 feet, and a depth of 4 feet.**
*(Average) (Skill 23.1)*

A. 3 feet
B. 4 feet
C. 5 feet
D. 6 feet

18. **Solve for x:** $|2x + 3| > 4$
*(Average) (Skill 24.2)*

A. $-\frac{7}{2} > x > \frac{1}{2}$
B. $-\frac{1}{2} > x > \frac{7}{2}$
C. $x < \frac{7}{2}$ or $x < \frac{1}{2}$
D. $x < -\frac{7}{2}$ or $x > \frac{1}{2}$

19. **Solve for x: 3(5 + 3x) − 8 = 88**
*(Average) (Skill 24.2)*

A. 30
B. 9
C. 4.5
D. 27

20. **For the following statements:**

1. **All parallelograms are rectangles**
2. **Some rhombuses are squares**
3. **All parallelograms are rhombuses**

*(Average) (Skill 25.1)*

A. All statements are correct
B. All statements are incorrect
C. Only 1 and 3 are correct
D. Only 2 is correct

21. **Square is to cube as triangle is to:**
*(Rigorous) (Skill 25.1)*

A. Sphere
B. Rectangle
C. Cone
D. Tetrahedron

22. **Which of the following statements about a trapezoid is incorrect?**
*(Average) (Skill 25.1)*

A. It has one pair of parallel sides
B. The parallel sides are called bases
C. If the two bases are the same length, the trapezoid is called isosceles
D. The median is parallel to the bases

23. **A _____ is the union of all points on a simple closed surface and all points in its interior.**
*(Average) (Skill 25.2)*

A. solid
B. plane
C. face
D. vertices

24. What is the probability of drawing 2 consecutive aces from a standard deck of cards if you replace the first card to draw the second?
    *(Rigorous) (Skill 26.1)*

    A. $\dfrac{3}{51}$

    B. $\dfrac{1}{221}$

    C. $\dfrac{2}{104}$

    D. $\dfrac{2}{52}$

25. Which type of graph uses symbols to represent quantities?
    *(Easy) (Skill 27.1)*

    A. Bar graph
    B. Line graph
    C. Pictograph
    D. Circle graph

26. Third-grade students are looking at a circle graph. Most of the graph is yellow. A small wedge of the graph is blue. Each colored section also has a number followed by a symbol. What are the students most likely learning about?
    *(Average) (Skill 27.1)*

    A. Addition
    B. Venn diagrams
    C. Percentages
    D. Pictographs

27. Percentiles divide data into:
    *(Average) (Skill 27.2)*

    A. "Standard nine" percents
    B. 100 equal parts
    C. 4 quartile percents
    D. Frequency intervals

28. Given the ungrouped data below, which is the correct calculation of the range?
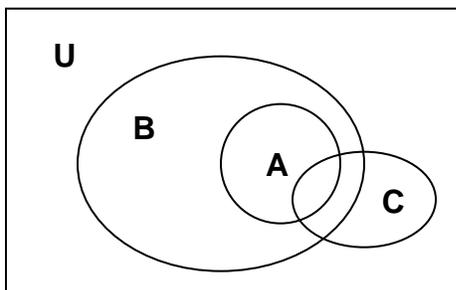    *(Rigorous) (Skill 27.3)*

    | 15 | 22 | 28 | 25 | 34 | 38 |
    |----|----|----|----|----|----|
    | 25 | 30 | 33 | 19 | 23 | |

    A. 38 - 25 = 13
    B. 5+ 38 = 53
    C. 38 - 15 = 23
    D. 30 + 38 = 68

29. Select the statement that is the negation of "Some winter nights are cold."
    *(Average) (Skill 28.2)*

    A. All winter nights are not cold
    B. Some winter nights are cold
    C. All winter nights are cold
    D. None of the winter nights are cold

30. Set A, B, C, and U are related as shown in the diagram.



Which of the following is true, assuming not one of the six regions is empty?
(Rigorous) (Skill 28.2)

A. Any element that is a member of set B is also a member of set A
B. No element is a member of all three sets A, B, and C
C. Any element that is a member of set U is also a member of set A, B, and C
D. None of the above

## SCIENCE

31. Which of the following is true of matter?
(Easy) (Skill 29.1)

A. Is defined by its characteristics
B. Has the property of volume
C. Takes up space
D. All of the above

32. The boiling point of water is set at?
(Average) (Skill 29.1)

A. 100°C
B. 0°C
C. H2\O
D. kg

33. Newton's _____ law of motion states that for every action there is an equal and opposite reaction.
(Rigorous) (Skill 29.3)

A. first
B. second
C. third
D. fourth

34. Which of the following is most accurate?
(Rigorous) (Skill 29.3)

A. Mass is always constant; weight may vary by location
B. Mass and weight are both always constant
C. Weight is always constant; mass may vary by location
D. Mass and weight may both vary by location

35. The Law of Conservation of Energy states that:
(Average) (Skill 29.4)

A. There must be the same number of products and reactants in any chemical equation
B. Objects always fall toward large masses such as planets
C. Energy is neither created nor destroyed but may change form
D. Lights must be turned off when not in use, by state regulation

36. Which of the following are true of electrically charged objects?
*(Average) (Skill 29.5)*

A. Like charges repel one another
B. Opposite charges attract each other
C. A neutral object has no net change
D. All of the above

37. The formula: I = V / R Is representative of:
*(Rigorous) (Skill 29.5)*

A. Newton's Second Law of Motion
B. Pasteur's Law
C. Ohm's Law
D. None of the above

38. When light hits a surface, it becomes:
*(Average) (Skill 29.6)*

A. Refracted
B. Reflected
C. Diffracted
D. Impacted

39. A series of experiments on pea plants formed by showed that two invisible markers existed for each trait, and one marker dominated the other.
*(Rigorous) (Skill 30.3)*

A. Pasteur
B. Watson and Crick
C. Mendel
D. Mendeleev

40. In the world of genetics one dominant gene and one recessive gene is called:
*(Rigorous) (Skill 30.3)*

A. Heterozygous
B. Phenotype
C. Genotype
D. Homozygous

41. What is the most accurate description of the Water Cycle?
*(Rigorous) (Skill 31.1)*

A. Rain comes from clouds, filling the ocean. The water then evaporates and becomes clouds again
B. Water circulates from rivers into groundwater and back, while water vapor circulates in the atmosphere
C. Water is conserved except for chemical or nuclear reactions, and any drop of water could circulate through clouds, rain, groundwater, and surface water
D. Weather systems cause chemical reactions to break water into its atoms

42. Earth is the ___ planet away from the sun in our solar system.
*(Easy) (Skill 31.4)*

A. fifth
B. fourth
C. third
D. sixth

43. The Moon orbits the Earth every _____ days.
*(Easy) (Skill 31.4)*

A. 7
B. 27
C. 30
D. 365

44. When is a hypothesis formed?
*(Average) (Skill 32.1)*

A. Before the data is taken
B. After the data is taken
C. After the data is analyzed
D. Concurrent with graphing

45. What is the scientific method?
*(Average) (Skill 32.1)*

A. It is the process of doing an experiment and writing a laboratory report
B. It is the process of using open inquiry and repeatable results to establish theories
C. It is the process of reinforcing scientific principles by confirming results
D. It is the process of recording data and observations

46. Identify the control in the following experiment: A student had four corn plants and was measuring photosynthetic rate (by measuring growth mass). Half of the plants were exposed to full (constant) sunlight, and the other half were kept in 50% (constant) sunlight.
*(Rigorous) (Skill 32.1)*

A. The control is a set of plants grown in full (constant) sunlight
B. The control is a set of plants grown in 50% (constant) sunlight
C. The control is a set of plants grown in the dark
D. The control is a set of plants grown in a mixture of natural levels of sunlight

47. Which of the following data sets is properly represented by a bar graph?
*(Easy) (Skill 32.3)*

A. Number of people choosing to buy cars vs. color of car bought
B. Number of people choosing to buy cars vs. age of car customer
C. Number of people choosing to buy cars vs. distance from car lot to customer home
D. Number of people choosing to buy cars vs. time since last car purchase

48. When measuring the volume of water in a graduated cylinder, where does one read the measurement?
*(Average) (Skill 32.4)*

A. At the highest point of the liquid
B. At the bottom of the meniscus curve
C. At the closest mark to the top of the liquid
D. At the top of the plastic safety ring

49. _____ is known as the father of microscopy.
*(Rigorous) (Skill 34.1)*

A. Anton van Leeuwenhoek
B. Robert Hooke
C. Andreas Vesalius
D. Carl Von Linnaeus

50. Scientists use _____ and ____ to form explanations of natural events.
*(Average) (Skill 34.2)*

A. systems, order
B. evidence, models
C. form, function
D. evolution, equilibrium

## HEALTH AND PHYSICAL EDUCATION

51. Which of the following is NOT a type of muscle tissue?
*(Average) (Skill 35.1)*

A. Skeletal
B. Cardiac
C. Smooth
D. Peripheral

52. The central nervous system (CNS) consists of:
*(Rigorous) (Skill 35.1)*

A. Brain and spinal cord
B. Nerves and spinal cord
C. Spinal cord and muscles
D. Brain and nerves

53. The neuron is the basic unit of the nervous system. It consists of:
*(Rigorous) (Skill 35.1)*

A. Axon
B. Dendrite
C. Cell body
D. All of the above

54. _____ is the body's ability to recognize and destroy an antigen before it causes harm.
*(Average) (Skill 35.1)*

A. Phagocytosis
B. Immunity
C. Oxidants
D. Pathogens

55. An inflammation of the outermost layer of the eye and the inner surface of the eyelid is called:
*(Easy) (Skill 35.4)*

A. Asthma
B. Pediculosis
C. Conjunctivitis
D. Allergy

56. Which of the following are factors that influence public health:
    *(Average) (Skill 35.5)*

    A. Pollution levels
    B. Availability of health care
    C. Community resources
    D. All of the above

57. Which of the following are important conflict resolutions principles?
    *(Average) (Skill 35.6)*

    A. Accept responsibility
    B. Focus on the future
    C. Think before reacting
    D. All of the above

58. Which of the following might help to decrease violence in the school systems?
    *(Easy) (Skill 35.6)*

    A. School security officers
    B. Locker searches
    C. Metal detectors
    D. All of the above

59. A Body Mass Index (BMI) of _____ or higher can lead to heart attacks, stroke, and etc.
    *(Rigorous) (Skill 36.1)*

    A. 25
    B. 15
    C. 10
    D. 50

60. During a physical fitness examination, 17-year-old male student was able performed 20 sit-ups and run a mile in 8 minutes. He demonstrated a body fat composition of 17%. Which is the best interpretation of his fitness level?
    *(Rigorous) (Skill 36.1)*

    A. Average muscular endurance, good cardiovascular endurance; appropriate body fat composition
    B. Low muscular endurance, average cardiovascular endurance; high body fat composition
    C. Low muscular endurance, average cardiovascular endurance; appropriate body fat composition
    D. Low muscular endurance, low cardiovascular endurance; appropriate body fat composition

61. The ability for a muscle(s) to repeatedly contract over a period of time is:
    *(Easy) (Skill 36.1)*

    A. Cardiovascular endurance
    B. Muscle endurance
    C. Muscle strength
    D. Muscle force

62. **What is the proper order of sequential development for the acquisition of locomotor skills?**
*(Rigorous) (Skill 37.1)*

  A. Creep, crawl, walk, jump, run, slide, gallop, hop, leap, skip; step-hop
  B. Crawl, walk, creep, slide, walk, run, hop, leap, gallop, skip; step-hop
  C. Creep, crawl, walk, slide, run, hop, leap, skip, gallop, jump; step-hop
  D. Crawl, creep, walk, run, jump, hop, gallop, slide, leap, skip; step-hop

63. **Which of the following does not modify overload?**
*(Average) (Skill 37.2)*

  A. Frequency
  B. Perceived exertion
  C. Time
  D. Intensity

64. **A physical education instructor anticipates and prevents potential injuries by watching for hidden injuries and taking an injury evaluation of the entire class. Which of the following strategies to prevent injuries is the teacher demonstrating?**
*(Rigorous) (Skill 37.3)*

  A. Maintaining hiring standards
  B. Proper use of equipment
  C. Proper procedures for emergencies
  D. Participant screening

65. **A basketball team has an outstanding rebounder. To keep this player near the opponent's basket, which strategy should the coach implement?**
*(Average) (Skill 37.4)*

  A. Pick-and-Roll
  B. Give-and-Go
  C. Zone defense
  D. Free-lancing

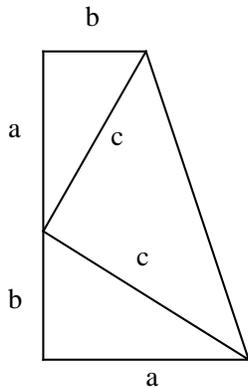**Constructed Response Sample Questions: Math & Science**

Directions: In the next few pages, you will see eleven constructed response prompts. You will need to prepare a short essay for each one. Each assignment will be to write a response of about 300 words on the assigned topic. Your score will be based on these following factors:

- Purpose: You will be assessed on the extent to which you answer the question on each prompt. You must write your response so that it directly addresses what the prompt asks you to do.
- Subject-Matter Knowledge: You will be assessed on the extent to which you demonstrate content knowledge.
- Support: You will be assessed on the extent to which you provide a coherent, fully supported response. Your response should provide evidence for any assertions you make.

Even though your writing ability will not be directly assessed, please take care to write an essay that is as free of grammatical errors as possible.

**MATH**

**SAMPLE ESSAY QUESTION**



Using your knowledge of algebra and geometry:

- Write an expression for the area of the trapezoid based using the formula: area = half the sum of the bases times the altitude
- Write an expression for the area of the trapezoid in terms of the area of its component parts (the three triangles)
- Set these two expressions equal and show that this leads to a proof of the Pythagorean theorem

**SCIENCE**

**SAMPLE ESSAY QUESTION**

Discuss the scientific process.

**Answer Key: Math, Science, Health and Physical Education**

| | | |
|---|---|---|
| 1. B | 23. A | 45. B |
| 2. A | 24. B | 46. A |
| 3. C | 25. C | 47. A |
| 4. B | 26. C | 48. B |
| 5. B | 27. B | 49. A |
| 6. A | 28. C | 50. B |
| 7. D | 29. D | 51. D |
| 8. D | 30. D | 52. A |
| 9. C | 31. D | 53. D |
| 10. C | 32. A | 54. B |
| 11. A | 33. C | 55. C |
| 12. B | 34. A | 56. D |
| 13. C | 35. C | 57. D |
| 14. B | 36. D | 58. D |
| 15. A | 37. C | 59. A |
| 16. C | 38. B | 60. C |
| 17. C | 39. C | 61. B |
| 18. D | 40. A | 62. D |
| 19. B | 41. C | 63. B |
| 20. D | 42. C | 64. D |
| 21. D | 43. B | 65. C |
| 22. C | 44. A | |

**Rigor Table: Math, Science, Health and Physical Education**

|  | Easy 21% | Average 45% | Rigorous 34% |
|---|---|---|---|
| **Question #** | 1, 4, 7, 8, 10, 16, 25, 31, 42, 43, 47, 55, 58, 61 | 2, 3, 6, 9, 11, 15, 17, 18, 19, 20, 22, 23, 26, 27, 29, 32, 35, 36, 38, 44, 45, 48, 50, 51, 54, 56, 57, 63, 65 | 5, 12, 13, 14, 21, 24, 28, 30, 33, 34, 37, 39, 40, 41, 46, 49, 52, 53, 59, 60, 62, 64 |

**ORELA Multiple Subjects 001, 002, 003 Sample Test with Rationales**

**MATH**

1.  **Which words in a test problem would indicate that an addition operation is needed?**
    *(Easy) (Skill 19.1)*

    A.  Product
    B.  Combine
    C.  Difference
    D.  Split into equal groups

**Answer B: Combine**
Addition operations are indicated by the following words: total, sum, combine, and plus. Subtraction operations are indicated by the following words: difference, take away, less, and minus. Multiplication operations are indicated by the following words: product, times, and groups of. Division operations are indicated by the following words: split into equal groups, divide, and quotient.

2.  **Each *(x,y)* relationship between a pair of values is called the _____ and can be plotted on a graph.**
    *(Average) (Skill 19.3)*

    A.  Coordinate pair
    B.  Parallel value
    C.  Symbolic rule
    D.  Proportional function

**Answer: A. Coordinate pair**
Each (x,y) relationship between a pair of values is called the coordinate pair and can be plotted on a graph. The relationship between two or more variables can be analyzed using a table, graph, written description, or symbolic rule.

3. **Which of the following is the least common multiple of 20, 30, and 40?**
   *(Average) (Skill 20.1)*

   A.     40
   B.     20
   C.     120
   D.     80

**Answer: C. 120**
The largest number given is 40, but 30 will not divide evenly into 40. The next multiple of 40 is 80 (2 x 40), but 30 will not divide evenly into 80 either. The next multiple of 40 is 120. 120 is divisible by both 20 and 30, so 120 is the LCM (least common multiple).

4. **Find the least common multiple of 27, 90, and 84.**
   *(Easy) (Skill 20.1)*

   A.     90
   B.     3,780
   C.     204,120
   D.     1,260

**Answer: B. 3.780**
To find the least common multiple of the above numbers, factor each into its prime factors and multiply each common factor the maximum number of times it occurs. Thus, 27= 3 x 3 x 3; 90 = 2 x 3 x 3 x 5; 84 = 2 x 2 x 3 x 7; LCM = 2 x 2 x 3 x 3 x 3 x 5 x 7 = 3,780.

5. **What is the greatest common factor of 16, 28, and 36?**
   *(Rigorous) (Skill 20.1)*

   A.     2
   B.     4
   C.     8
   D.     16

**Answer: B. 4**
The smallest number in this set is 16; its factors are 1, 2, 4, 8 and 16. 16 in the largest factor, but it does not divide into 28 or 36. Neither does 8. 4 does factor into both 28 and 36. The answer is B.

6.  **Which of the following is an example of scientific notation?**
    *(Average) (Skill 20.2)*

    A.      $46{,}368{,}000 = 4.6368 \times 10^7$
    B.      $400.0 = 400\%$
    C.      $a + b = b + a$

    D.      $\dfrac{3}{5} + \dfrac{2}{3} = \dfrac{3(3)}{3(5)} + \dfrac{5(2)}{5(3)} = \dfrac{9}{15} + \dfrac{10}{15} = \dfrac{19}{15}$

**Answer: A. 46,368,000** $= 4.6368 \times 10^7$
An example of how to write a number (46,368,000) in scientific notation:
1)    Introduce a decimal point and decimal places.
      46,368,000 = 46,368,000.0000
2)    Make a mark between the two digits that give a number between -9.9 and 9.9.
      $4 \wedge 6{,}368{,}000_{.0000}$
3)    Count the number of digit places between the decimal point and the $\wedge$ mark. This number is the '$n$'-the power of ten.
      So, 46,368,0000

7.  **Which of the following is a part of mathematical questioning?**
    *(Easy) (Skill 21.4)*

    A.      Eliminate possible solutions
    B.      Devise questions to clarify the problem
    C.      Identify the problem
    D.      All of the above

**Answer: D. All of the above**
The questioning technique is a mathematic process skill in which students devise questions to clarify the problem, eliminate possible solutions, and simplify the problem solving process. By developing and attempting to answer simple questions, students can tackle difficult and complex problems.

8.  **The property rules apply to:**
    *(Easy) (Skill 22.3)*

    A.    Addition and subtraction
    B.    Multiplication and division
    C.    Addition and multiplication
    D.    Addition, subtraction, multiplication, and division

**Answer: D. Addition, subtraction, multiplication, and division**
Properties are rules that apply for addition, subtraction, multiplication, or division of real numbers.

9.  **Evaluate: 1/3 – 1/2 + 1/6**
    *(Average) (Skill 22.4)*

    A.    5/6
    B.    2/3
    C.    0
    D.    1

**Answer: C. 0**
1/3 – 1/2 + 1/6 = 2/6 – 3/6 + 1/6 = (2-3+1)/6 = 0

10. **A teacher is introducing the concept of multiplication to her third grade students. Identify another way that they might write 4 x 5.**
    *(Easy) (Skill 22.4)*

    A.    4 + 5
    B.    5 + 4
    C.    4 + 4 + 4 + 4 + 4
    D.    5 + 5 + 5 + 5 + 5

**Answer: C. 4 + 4 + 4 + 4 + 4**
The multiplication concept can translate to an addition problem. 4 x 5 is the same as the number 4 added 5 times.

11. **A percent can be converted to a decimal by:**
    *(Average) (Skill 22.4)*

    A.    Dividing by 100
    B.    Multiplying by 100
    C.    Multiplying by 10
    D.    Dividing by 10

**Answer: A. Dividing by 100**
A percent can be converted to a decimal by dividing by 100, or moving the decimal point two places to the left.
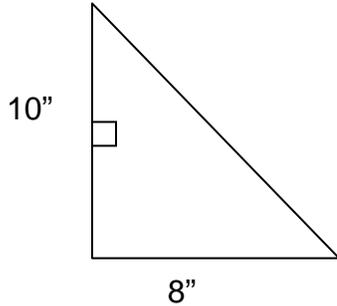
Examples:
84% = 0.84
3 % = 0.03
60% = 0.6

12. **The area of a _____ is found by the formula A = $\Pi r2$.**
    *(Rigorous) (Skill 23.1)*

    A.    square
    B.    circle
    C.    triangle
    D.    hexagon

**Answer: B. circle**
The area of a circle is found by the formula A = $\Pi r2$.

13. **What is the area of this triangle?**
    *(Rigorous) (Skill 23.1)*



A.   80 square inches
B.   20 square inches
C.   40 square inches
D.   30 square inches

**Answer: C. 40 square inches**

The area of a triangle is $\frac{1}{2}bh$ .

$\frac{1}{2}x8x10 = 40$ square inches.

14. **3 km is equivalent to:**
    *(Rigorous) (Skill 23.1)*

A.   300 cm
B.   3000 m
C.   3000 cm
D.   .300 m

**Answer: B. 3000 m**
To change kilometers to meters, move the decimal 3 places to the right.
1000 meters = 1 kilometer

**15.** **The term "cubic feet" indicates which kind of measurement?**
*(Average) (Skill 23.1)*

A.  Volume
B.  Mass
C.  Length
D.  Distance

**Answer: A. Volume**
The word cubic indicates that this is a term describing volume.

**16.** **Find the surface area of a box that is 3 feet wide, 5 feet tall, and 4 feet deep.**
*(Easy) (Skill 23.1)*

A.  47 square feet
B.  60 square feet
C.  94 square feet
D.  188 square feet

**Answer: C. 94 square feet**
Assume the base of the rectangular solid (box) is 3 by 4, and the height is 5. Then the surface area of the top and bottom together is 2(12) = 24. The sum of the areas of the front and back are 2(15) = 30, and the sum of the areas of the sides are 2(20) = 40. The total surface area is therefore 94 square feet (24 + 30 + 40).

**17.** **Find the height of a box with a surface area of 94 square feet, a width of 3 feet, and a depth of 4 feet.**
*(Average) (Skill 23.1)*

A.  3 feet
B.  4 feet
C.  5 feet
D.  6 feet

**Answer: C. 5 feet**
Use the expression for surface area and solve for the unknown value $h$.
$94 = 2(3h) + 2(4h) + 2(12)$
$94 = 6h + 8h + 24$
$94 = 14h + 24$
$70 = 14h$
$5 = h$
Thus the height of the box is 5 feet.

18. **Solve for x:** $|2x +3| > 4$
*(Average) (Skill 24.2)*

  A.    $-\frac{7}{2} > x > \frac{1}{2}$
  B.    $-\frac{1}{2} > x > \frac{7}{2}$
  C.    $x < \frac{7}{2}$ or $x < \frac{1}{2}$
  D.    $x < -\frac{7}{2}$ or $x > \frac{1}{2}$

**Answer: D.** $x < \frac{7}{2}$ or $x < \frac{1}{2}$

$x < -\frac{7}{2}$ or $x > \frac{1}{2}$

The quantity within the absolute value symbols must be either > 4 or < -4. Solve the two inequalities 2x + 3 > 4 or 2x + 3 < -4.

19. **Solve for x: 3(5 + 3x) − 8 = 88**
*(Average) (Skill 24.2)*

  A.    30
  B.    9
  C.    4.5
  D.    27

**Answer: B. 9**
3(5 + 3x) − 8 = 88
15 + 9x − 8 = 88
7 + 9x = 88
9x = 81
X = 9

20. **For the following statements:**

    1. **All parallelograms are rectangles**
    2. **Some rhombuses are squares**
    3. **All parallelograms are rhombuses**

    *(Average) (Skill 25.1)*

    A.      All statements are correct
    B.      All statements are incorrect
    C.      Only 1 and 3 are correct
    D.      Only 2 is correct

**Answer: D. Only 2 is correct**
Statement 1 is false because only some parallelograms are rectangles. Statement 2 is true. Statement 3 is false because only some parallelograms are rhombuses. So only 2 is correct, which is answer D.

21. **Square is to cube as triangle is to:**
    *(Rigorous) (Skill 25.1)*

    A.      Sphere
    B.      Rectangle
    C.      Cone
    D.      Tetrahedron

**Answer D. Tetrahedron**
A square is a two-dimensional polygon, and a cube is a three-dimensional solid made up of squares. A triangle is a two-dimensional polygon, and a tetrahedron is a three-dimensional solid made up of triangles.

22. **Which of the following statements about a trapezoid is incorrect?**
    *(Average) (Skill 25.1)*

    A.      It has one pair of parallel sides
    B.      The parallel sides are called bases
    C.      If the two bases are the same length, the trapezoid is called isosceles
    D.      The median is parallel to the bases

**Answer C. If the two bases are the same length, the trapezoid is called isosceles**
A trapezoid is isosceles if the two legs (not bases) are the same length.

**23.** A _____ is the union of all points on a simple closed surface and all points in its interior.
*(Average) (Skill 25.2)*

    A.      solid
    B.      plane
    C.      face
    D.      vertices

**Answer: A. solid**
We refer to three-dimensional figures in geometry as solids. A solid is the union of all points on a simple closed surface and all points in its interior. Each polygonal region is called a face of the polyhedron. The vertices and edges of the polygonal regions are called the vertices and edges of the polyhedron.

**24.** What is the probability of drawing 2 consecutive aces from a standard deck of cards if you replace the first card to draw the second?
*(Rigorous) (Skill 26.1)*

    A.    $\dfrac{3}{51}$
    B.    $\dfrac{1}{221}$
    C.    $\dfrac{2}{104}$
    D.    $\dfrac{2}{52}$

**Answer: B.** $\dfrac{1}{221}$
There are 4 aces in the 52-card deck.
P(first ace) = $\dfrac{4}{52}$. P(second ace) = $\dfrac{3}{51}$.
P(first ace and second ace) = P(one ace)xP(second ace|first ace)
$f=\dfrac{4}{52}\times\dfrac{3}{51}=\dfrac{1}{221}$.

**25. Which type of graph uses symbols to represent quantities?**
*(Easy) (Skill 27.1)*

A. Bar graph
B. Line graph
C. Pictograph
D. Circle graph

**Answer C: Pictograph**
A pictograph shows comparison of quantities using symbols. Each symbol represents a number of items.

**26. Third-grade students are looking at a circle graph. Most of the graph is yellow. A small wedge of the graph is blue. Each colored section also has a number followed by a symbol. What are the students most likely learning about?**
*(Average) (Skill 27.1)*

A. Addition
B. Venn diagrams
C. Percentages
D. Pictographs

**Answer C. Percentages**
The symbol after the numbers of the sections indicates that students are learning about percents instead of an exact number.

**27. Percentiles divide data into:**
*(Average) (Skill 27.2)*

A. "Standard nine" percents
B. 100 equal parts
C. 4 quartile percents
D. Frequency intervals

**Answer: B. 100 equal parts**
Percentiles divide data into 100 equal parts. A person whose score falls in the 65th percentile has outperformed 65 percent of all those who took the test. Stanine "standard nine" scores combine the understandability of percentages with the properties of the normal curve of probability. Quartiles divide the data into 4 parts.

28. **Given the ungrouped data below, which is the correct calculation of the range?**
    *(Rigorous) (Skill 27.3)*

|  |  |  |  |  |  |
|----|----|----|----|----|----|
| 15 | 22 | 28 | 25 | 34 | 38 |
| 25 | 30 | 33 | 19 | 23 |    |

A.  38 - 25 = 13
B.  5+ 38 = 53
C.  38 - 15 = 23
D.  30 + 38 = 68

**Answer: C. 38 - 15 = 23**
Range: $38 - 15 = 23$ ..
The range is the difference between the highest and lowest value of data items. The median of a set is the middle number. The mode of a set of numbers is the number that occurs with the greatest frequency.
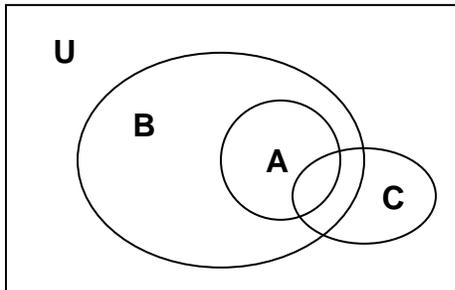
29. **Select the statement that is the negation of "Some winter nights are cold."**
    *(Average) (Skill 28.2)*

A.  All winter nights are not cold
B.  Some winter nights are cold
C.  All winter nights are cold
D.  None of the winter nights are cold

**Answer: D. None of the winter nights are cold**
If a statement is true, then its negation must be false (and vice versa). Negation of "some are" is "none are." So the negation statement is "None of the winter nights are cold." So the answer is choice D.

**30. Set A, B, C, and U are related as shown in the diagram.**



**Which of the following is true, assuming not one of the six regions is empty?** *(Rigorous) (Skill 28.2)*

A.      Any element that is a member of set B is also a member of set A
B.      No element is a member of all three sets A, B, and C
C.      Any element that is a member of set U is also a member of set A, B, and C
D.      None of the above

**Answer: D. None of the above**
Choice A is incorrect because not all members of set B are also in set A. Choice B is incorrect because there are elements that are members of all three sets A, B, and C. Choice C is incorrect because not all members of set U is a member of set B. This leaves choice D, which states that none of the above choices are true.

**SCIENCE**

**31. Which of the following is true of matter?** *(Easy) (Skill 29.1)*

A.      Is defined by its characteristics
B.      Has the property of volume
C.      Takes up space
D.      All of the above

**Answer: D. All of the above**
Everything in our world is made up of matter, whether it is a rock, a building, an animal, or a person. Matter is defined by its characteristics: It takes up space, and it has mass. In addition to mass, matter also has the property of volume. Volume is the amount of cubic space that an object occupies.

**32. The boiling point of water is set at?**
*(Average) (Skill 29.1)*

    A.      100°C
    B.      0°C
    C.      $H_2 \backslash O$
    D.      kg

**Answer: A. 100°C**
The freezing point of water is set at 0°C and the boiling point is 100°C. The interval between the two is divided into 100 equal parts called degrees Celsius.

**33. Newton's _____ law of motion states that for every action there is an equal and opposite reaction.**
*(Rigorous) (Skill 29.3)*

    A.      first
    B.      second
    C.      third
    D.      fourth

**Answer: C. third**
Newton's third law states that for every action there is an equal and opposite reaction. Therefore, if an object exerts a force on another object, that second object exerts an equal and opposite force on the first.

**34. Which of the following is most accurate?**
*(Rigorous) (Skill 29.3)*

    A.      Mass is always constant; weight may vary by location
    B.      Mass and weight are both always constant
    C.      Weight is always constant; mass may vary by location
    D.      Mass and weight may both vary by location

**Answer: A. Mass is always constant; weight may vary by location**
When considering a situation exclusive of nuclear reactions, mass is constant (mass, the amount of matter in a system, is conserved). Weight, on the other hand, is the force of gravity on an object, which is subject to change due to changes in the gravitational field and/or the location of the object.

**35.** **The Law of Conservation of Energy states that:**
*(Average) (Skill 29.4)*

    A.      There must be the same number of products and reactants in any chemical equation
    B.      Objects always fall toward large masses such as planets
    C.      Energy is neither created nor destroyed but may change form
    D.      Lights must be turned off when not in use, by state regulation

**Answer: C. Energy is neither created nor destroyed, but may change form**
Choice C is a summary of the Law of Conservation of Energy (for non-nuclear reactions). In other words, energy can be transformed into various forms such as kinetic, potential, electric, or heat energy, but the total amount of energy remains constant. Choice A is untrue, as demonstrated by many synthesis and decomposition reactions. Choices B and D may be sensible, but they are not relevant in this case.

**36.** **Which of the following are true of electrically charged objects?**
*(Average) (Skill 29.5)*

    A.      Like charges repel one another
    B.      Opposite charges attract each other
    C.      A neutral object has no net change
    D.      All of the above

**Answer: D. All of the above**
Electrically charged objects share these characteristics:

1. Like charges repel one another.
2. Opposite charges attract each other.
3. Charge is conserved.

A neutral object has no net change. If the plastic rod and fur are initially neutral, when the rod becomes charged by the fur a negative charge is transferred from the fur to the rod. The net negative charge on the rod is equal to the net positive charge on the fur.

37. **The formula: I = V / R Is representative of:**
    *(Rigorous) (Skill 29.5)*

    A.     Newton's Second Law of Motion
    B.     Pasteur's Law
    C.     Ohm's Law
    D.     None of the above

**Answer: C. Ohm's Law**
Potential difference, resistance, and current form a relationship know as Ohm's Law. Current (I) is measured in amperes and is equal to potential difference (V) divided by resistance (R).

38. **When light hits a surface, it becomes:**
    *(Average) (Skill 29.6)*

    A.     Refracted
    B.     Reflected
    C.     Diffracted
    D.     Impacted

**Answer: B. Reflected**
Shadows illustrate one of the basic properties of light. Light travels in a straight line. When light hits a surface, it is reflected. When light enters a different medium, it bends. This bending, or change of speed, is called refraction. Light can be diffracted, or bent around the edges of an object. Diffraction occurs when light goes through a narrow slit.

39. **A series of experiments on pea plants formed by showed that two invisible markers existed for each trait, and one marker dominated the other.**
    *(Rigorous) (Skill 30.3)*

    A.     Pasteur
    B.     Watson and Crick
    C.     Mendel
    D.     Mendeleev

**Answer: C. Mendel**
Gregor Mendel was a nineteenth-century Austrian botanist, who derived "laws" governing inherited traits. His work led to the understanding of dominant and recessive traits, carried by biological markers. Mendel crossbred different kinds of pea plants with varying features and observed the resulting new plants. He showed that genetic characteristics are not passed identically from one generation to the next. (Pasteur, Watson, Crick, and Mendeleev were other scientists with different specialties.)

**40. In the world of genetics one dominant gene and one recessive gene is called:** *(Rigorous) (Skill 30.3)*

  A.    Heterozygous
  B.    Phenotype
  C.    Genotype
  D.    Homozygous

**Answer: A. Heterozygous**
Heterozygous (hybrid) means having one dominant gene and one recessive gene. The dominant gene will be expressed due to the Law of Dominance. Genotype refers to the genes the organism has. Genes are represented with letters. AA, Bb, and tt are examples of genotypes. Phenotype refers to how the trait is expressed in an organism. Blue eyes, brown hair, and red flowers are examples of phenotypes. Homozygous (purebred) means having two of the same genes present; an organism may be homozygous dominant with two dominant genes or homozygous recessive with two recessive genes.

**41. What is the most accurate description of the Water Cycle?** *(Rigorous) (Skill 31.1)*

  A.    Rain comes from clouds, filling the ocean. The water then evaporates and becomes clouds again
  B.    Water circulates from rivers into groundwater and back, while water vapor circulates in the atmosphere
  C.    Water is conserved except for chemical or nuclear reactions, and any drop of water could circulate through clouds, rain, groundwater, and surface water
  D.    Weather systems cause chemical reactions to break water into its atoms

**Answer: C. Water is conserved except for chemical or nuclear reactions, and any drop of water could circulate through clouds, rain, groundwater, and surface water**
All natural chemical cycles, including the Water Cycle, depend on the principle of Conservation of Mass. (For water, unlike for elements such as Nitrogen, chemical reactions may cause sources or sinks of water molecules.) Any drop of water may circulate through the hydrologic system, ending up in a cloud, as rain, or as surface water or groundwater. Although choices A and B describe parts of the water cycle, the most comprehensive answer is choice C.

42. **Earth is the ___ planet away from the sun in our solar system.**
    *(Easy) (Skill 31.4)*

    A.    fifth
    B.    fourth
    C.    third
    D.    sixth

**Answer: C. third**
Earth is the third planet away from the sun in our solar system. Earth's numerous types of motion and states of orientation greatly affect global conditions, such as seasons, tides, and lunar phases. The Earth orbits the Sun with a period of 365 days.

43. **The Moon orbits the Earth every _____ days.**
    *(Easy) (Skill 31.4)*

    A.    7
    B.    27
    C.    30
    D.    365

**Answer: B. 27**
The Earth's orientation in respect to the solar system is also responsible for our perception of the phases of the moon. As the Earth orbits the Sun with a period of 365 days, the Moon orbits the Earth every 27 days. As the Moon circles the Earth, its shape in the night sky appears to change. The changes in the appearance of the moon from Earth are known as "lunar phases."

44. **When is a hypothesis formed?**
    *(Average) (Skill 32.1)*

    A.    Before the data is taken
    B.    After the data is taken
    C.    After the data is analyzed
    D.    Concurrent with graphing

**Answer: A. Before the data is taken**
A hypothesis is an educated guess, made before undertaking an experiment. The hypothesis is then evaluated based on the observed data. Therefore, the hypothesis must be formed before the data is taken, not during or after the experiment.

45. **What is the scientific method?**
    *(Average) (Skill 32.1)*

    A.      It is the process of doing an experiment and writing a laboratory report
    B.      It is the process of using open inquiry and repeatable results to establish theories
    C.      It is the process of reinforcing scientific principles by confirming results
    D.      It is the process of recording data and observations

**Answer: B. It is the process of using open inquiry and repeatable results to establish theories**
Scientific research often includes elements from choices A, C, and D, but the basic underlying principle of the scientific method is that people ask questions and do repeatable experiments to answer those questions and develop informed theories of why and how things happen.

46. **Identify the control in the following experiment: A student had four corn plants and was measuring photosynthetic rate (by measuring growth mass). Half of the plants were exposed to full (constant) sunlight, and the other half were kept in 50% (constant) sunlight.**
    *(Rigorous) (Skill 32.1)*

    A.      The control is a set of plants grown in full (constant) sunlight
    B.      The control is a set of plants grown in 50% (constant) sunlight
    C.      The control is a set of plants grown in the dark
    D.      The control is a set of plants grown in a mixture of natural levels of sunlight

**Answer: A. The control is a set of plants grown in full (constant) sunlight**
In this experiment, the goal was to measure how two different amounts of sunlight affected plant growth. The control in any experiment is the "base case," or the usual situation without a change in variable. Because the control must be studied alongside the variable, choices C and D are omitted (because they were not in the experiment). The better choice out of A and B is A, because usually plants are assumed to have the best growth and their usual growing circumstances in full sunlight. This is particularly true for crops like the corn plants in this question.

**47.** **Which of the following data sets is properly represented by a bar graph?**
*(Easy) (Skill 32.3)*

A. Number of people choosing to buy cars vs. color of car bought
B. Number of people choosing to buy cars vs. age of car customer
C. Number of people choosing to buy cars vs. distance from car lot to customer home
D. Number of people choosing to buy cars vs. time since last car purchase

**Answer: A. Number of people choosing to buy cars vs. color of car bought**
A bar graph should be used only for data sets in which the independent variable is non-continuous (discrete), e.g. gender, color, etc. Any continuous independent variable (age, distance, time, etc.) should yield a scatter-plot when the dependent variable is plotted.

**48.** **When measuring the volume of water in a graduated cylinder, where does one read the measurement?**
*(Average) (Skill 32.4)*

A. At the highest point of the liquid
B. At the bottom of the meniscus curve
C. At the closest mark to the top of the liquid
D. At the top of the plastic safety ring

**Answer: B. At the bottom of the meniscus curve**
To measure water in glass, you must look at the top surface at eye-level and ascertain the location of the bottom of the meniscus (the curved surface at the top of the water). The meniscus forms because water molecules adhere to the sides of the glass, which is a slightly stronger force than their cohesion to each other. This leads to a U-shaped top of the liquid column, the bottom of which gives the most accurate volume measurement. (Other liquids have different forces, e.g. mercury in glass, which has a convex meniscus.)

**49.** _____ **is known as the father of microscopy.**
*(Rigorous) (Skill 34.1)*

    A.     Anton van Leeuwenhoek
    B.     Robert Hooke
    C.     Andreas Vesalius
    D.     Carl Von Linnaeus

**Answer: A. Anton van Leeuwenhoek**
Anton van Leeuwenhoek is known as the father of microscopy. In the 1650s, Leeuwenhoek began making tiny lenses that gave magnifications up to 300x. He was the first to see and describe bacteria, yeast plants, and the microscopic life found in water. Andreas Vesalius (1514–1564), a Belgian anatomist and physician whose dissections of human body and descriptions of his findings helped to correct the misconceptions of science. Robert Hooke (1635–1703) was a renowned inventor, a natural philosopher, astronomer, experimenter, and a cell biologist. Carl Von Linnaeus (1707–1778), a Swedish botanist, physician, and zoologist is well known for his contributions in ecology and taxonomy.

**50.** **Scientists use \_\_\_\_ and \_\_\_ to form explanations of natural events.**
*(Average) (Skill 34.2)*

    A.     systems, order
    B.     evidence, models
    C.     form, function
    D.     evolution, equilibrium

**Answer: B. evidence, models**
Scientists use evidence and models to form explanations of natural events. Models are miniaturized representations of a larger event or system. Evidence is anything that furnishes proof.

**HEALTH AND PHYSICAL EDUCATION**

**51. Which of the following is NOT a type of muscle tissue?**
*(Average) (Skill 35.1)*

A.    Skeletal
B.    Cardiac
C.    Smooth
D.    Peripheral

**Answer D. Peripheral**
The main function of the muscular system is movement. There are three types of muscle tissue: skeletal, cardiac, and smooth. **Skeletal muscle** is voluntary. **Cardiac muscle** is found in the heart. **Smooth muscle** is involuntary. It is found in organs and enables functions such as digestion and respiration

**52. The central nervous system (CNS) consists of:**
*(Rigorous) (Skill 35.1)*

A.    Brain and spinal cord
B.    Nerves and spinal cord
C.    Spinal cord and muscles
D.    Brain and nerves

**Answer: A. Brain and spinal cord**
The **central nervous system (CNS)** consists of the brain and spinal cord. The CNS is responsible for the body's response to environmental stimuli. The spinal cord is located inside the spine. It sends out motor commands for movement in response to stimuli. The brain is where responses to more complex stimuli occur.

**53. The neuron is the basic unit of the nervous system. It consists of:**
*(Rigorous) (Skill 35.1)*

A.    Axon
B.    Dendrite
C.    Cell body
D.    All of the above

**Answer: D. All of the above**
The **neuron** is the basic unit of the nervous system. It consists of an axon, which carries impulses away from the cell body to the tip of the neuron; the dendrite, which carries impulses toward the cell body; and the cell body, which contains the nucleus. Synapses are spaces between neurons. Chemicals called neurotransmitters are found close to the synapse. The myelin sheath, composed of Schwann cells, covers the neurons and provides insulation.

54. **_____ is the body's ability to recognize and destroy an antigen before it causes harm.**
    *(Average) (Skill 35.1)*

    A. Phagocytosis
    B. Immunity
    C. Oxidants
    D. Pathogens

**Answer: B. Immunity**
Immunity is the body's ability to recognize and destroy an antigen before it causes harm. Active immunity develops after recovery from an infectious disease (e.g. chicken pox) or after a vaccination (e.g. mumps, measles, rubella). Passive immunity may be passed from one individual to another and is not permanent. A good example is the immunities passed from mother to nursing child. A baby's immune system is not well developed, and the passive immunity they receive through nursing keeps them healthier.

55. **An inflammation of the outermost layer of the eye and the inner surface of the eyelid is called:**
    *(Easy) (Skill 35.4)*

    A. Asthma
    B. Pediculosis
    C. Conjunctivitis
    D. Allergy

**Answer: C. Conjunctivitis**
**Conjunctivitis (pink eye)** is an inflammation of the outermost layer of the eye and the inner surface of the eyelid usually due to an allergic reaction or an infection. Other possible causes include overuse of contact lenses, foreign bodies in the eyes, vitamin deficiency, and dryness of the eye. Symptoms include redness, irritation, and watering of the eyes, with a variable level of itchiness depending on the cause of conjunctivitis.

56. **Which of the following are factors that influence public health:**
   *(Average) (Skill 35.5)*

   A.     Pollution levels
   B.     Availability of health care
   C.     Community resources
   D.     All of the above

**Answer: D. All of the above**
Factors that influence public health include availability of health care in the community, pollution levels, community resources to promote and facilitate healthy living habits, and awareness of healthy living habits among adults in the community. Availability of health care in the community that is both accessible and affordable has a critical influence on public health. Pollution levels in the community can affect public health by exposing the community as a whole to toxic and carcinogenic chemicals that negatively affect systems including (but not limited to) the circulatory and respiratory systems. Community resources are an important influence on public health. When financing is available to support health education and programs that encourage the development of healthy living habits, the health of the community will benefit.

**57. Which of the following are important conflict resolutions principles?**
*(Average) (Skill 35.6)*

A.      Accept responsibility
B.      Focus on the future
C.      Think before reacting
D.      All of the above

**Answer: D. All of the above**
Interpersonal conflict is a major source of stress and worry. Teaching students to successfully manage conflict will help them reduce stress levels throughout their lives, thereby limiting the adverse health effects of stress. The following is a list of conflict resolution principles and techniques.

1. Think before reacting – In a conflict situation, it is important to resist the temptation to react immediately. You should step back, consider the situation, and plan an appropriate response. In addition, do not react to petty situations with anger.
2. Listen – Be sure to listen carefully to the opposing party. Try to understand the other person's point of view.
3. Find common ground – Try to find some common ground as soon as possible. Early compromise can help ease the tension.
4. Accept responsibility – In every conflict there is plenty of blame to go around. Admitting when you are wrong shows you are committed to resolving the conflict.
5. Attack the problem, not the person – Personal attacks are never beneficial and usually lead to greater conflict and hard feelings.
6. Focus on the future – Instead of trying to assign blame for past events, focus on what we need to do differently to avoid future conflict.

**58. Which of the following might help to decrease violence in the school systems?**
*(Easy) (Skill 35.6)*

A.	School security officers
B.	Locker searches
C.	Metal detectors
D.	All of the above

**Answer: D. All of the above**
Violence is a primary concern of educators. Assault, rape, suicide, gang violence, and weapons in school are major issues confronting educators in today's schools. The fear of possible violence negatively affects students' growth, development, and ability to learn. In order to promote learning and healthy growth and development, schools must be violence-free. In order to accomplish this, schools must enact policies and procedures that promote an environment free from crime, drugs, and weapons. For some schools, this may include locker searches, full-time school security officers, and metal detectors.

**59. A Body Mass Index (BMI) of _____ or higher can lead to heart attacks, stroke, and etc.**
*(Rigorous) (Skill 36.1)*

A.	25
B.	15
C.	10
D.	50

**Answer: A. 25**
BMI equals weight in kilograms divided by height in meters, squared ($kg/m^2$). Although this method does not distinguish between fat mass and muscle mass, a BMI of 25 and higher increases many health risks such as high blood pressure, high cholesterol, type 2 diabetes, heart attack, and stroke. Normal values fall between 18.5 and 24.9.

60. **During a physical fitness examination, 17-year-old male student was able performed 20 sit-ups and run a mile in 8 minutes. He demonstrated a body fat composition of 17%. Which is the best interpretation of his fitness level? (Rigorous) (Skill 36.1)**

   A.   Average muscular endurance, good cardiovascular endurance; appropriate body fat composition
   B.   Low muscular endurance, average cardiovascular endurance; high body fat composition
   C.   Low muscular endurance, average cardiovascular endurance; appropriate body fat composition
   D.   Low muscular endurance, low cardiovascular endurance; appropriate body fat composition

**Answer: C. Low muscular endurance, average cardiovascular endurance; appropriate body fat composition**
A 17-year-old male who performs 20 sit-ups, runs a mile in 8 minutes, and has 17% fat composition has low muscular endurance, average cardiovascular endurance, and appropriate fat composition. Twenty sit-ups is a relatively low number. An 8-minute mile is an average time for a 17-year-old male. Finally, a body fat composition of 17% is appropriate.

61. **The ability for a muscle(s) to repeatedly contract over a period of time is: (Easy) (Skill 36.1)**

   A.   Cardiovascular endurance
   B.   Muscle endurance
   C.   Muscle strength
   D.   Muscle force

**Answer: B. Muscle endurance**
Muscle endurance gives the muscle the ability to contract over a period of time. Muscle strength is a prerequisite for the endurance of muscle. Cardiovascular endurance involves aerobic exercise.

**62.** **What is the proper order of sequential development for the acquisition of locomotor skills?**
*(Rigorous) (Skill 37.1)*

A.       Creep, crawl, walk, jump, run, slide, gallop, hop, leap, skip; step-hop
B.       Crawl, walk, creep, slide, walk, run, hop, leap, gallop, skip; step-hop
C.       Creep, crawl, walk, slide, run, hop, leap, skip, gallop, jump; step-hop
D.       Crawl, creep, walk, run, jump, hop, gallop, slide, leap, skip; step-hop

**Answer: D. Crawl, creep, walk, run, jump, hop, gallop, slide, leap, skip; step-hop**
LOCOMOTOR SKILL: A skill that utilizes the feet and moves you from one place to another.
CRAWL: A form of locomotion where the person moves in a prone position with the body resting on or close to the ground or on the hands and knees.
CREEP: A slightly more advanced form of locomotion in which the person moves on the hands and knees.
WALK: A form of locomotion in which body weight is transferred alternately from the ball (toe) of one foot to the heel of the other. At times, one foot is on the ground and during a brief phase, both feet are on the ground. There is no time when both feet are off the ground.
RUN: A form of locomotion much like the walk except that the tempo and body lean may differ. At times, one foot is on the ground and during a brief phase both feet are off the ground. There is no time when both feet are on the ground simultaneously.
JUMP: A form of locomotion in which the body weight is projected from one or two feet and lands on two feet. Basic forms are for height, from height, distance, continuous, and rebounding.
HOP: A form of locomotion in which the body is projected from one foot to the same foot.
GALLOP: A form of locomotion that is a combination of an open step by the leading foot and a closed step by the trailing foot. The same foot leads throughout. The rhythm is uneven.
SLIDE: The same action as the gallop except that the direction of travel is sideways instead of forward. The rhythm is uneven.
LEAP: An exaggerated running step. There is a transfer of weight from one foot to the other and a phase when neither foot is in contact with the ground.
SKIP: A locomotor skill that combines a hop and a step (walk or run). The rhythm is uneven.

63. **Which of the following does not modify overload?**
    *(Average) (Skill 37.2)*

    A.      Frequency
    B.      Perceived exertion
    C.      Time
    D.      Intensity

**Answer: B. Perceived exertion**
Time extension, frequency of movement, and intensity are all indicators of overload.
However, exertion is not a good indicator of overload, because measuring exertion is
subjective and difficult to monitor.

64. **A physical education instructor anticipates and prevents potential injuries by**
    **watching for hidden injuries and taking an injury evaluation of the entire**
    **class. Which of the following strategies to prevent injuries is the teacher**
    **demonstrating?**
    *(Rigorous) (Skill 37.3)*

    A.      Maintaining hiring standards
    B.      Proper use of equipment
    C.      Proper procedures for emergencies
    D.      Participant screening

**Answer: D. Participant screening**
In order for the instructor to know each student's physical status, she takes an injury
evaluation. Such surveys are one way to know the physical status of an individual. It
chronicles past injuries, tattoos, activities, and diseases the individual may have or had.
It helps the instructor to know the limitations of each individual. Participant screening
covers all forms of surveying and anticipation of injuries.

65. **A basketball team has an outstanding rebounder. To keep this player near**
    **the opponent's basket, which strategy should the coach implement?**
    *(Average) (Skill 37.4)*

    A.      Pick-and-Roll
    B.      Give-and-Go
    C.      Zone defense
    D.      Free-lancing

**Answer: C. Zone defense**
A zone defense, where each player guards an area of the court rather than an individual
player, allows an outstanding rebounder to remain near the basket. The give-and-go,
pick-and-roll, and free-lancing are offensive strategies that do not affect rebounding.

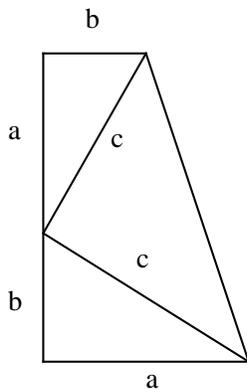**Constructed Response Sample Questions: Math & Science**

Directions: In the next few pages, you will see eleven constructed response prompts. You will need to prepare a short essay for each one. Each assignment will be to write a response of about 300 words on the assigned topic. Your score will be based on these following factors:

- ⊙ Purpose: You will be assessed on the extent to which you answer the question on each prompt. You must write your response so that it directly addresses what the prompt asks you to do.
- ⊙ Subject-Matter Knowledge: You will be assessed on the extent to which you demonstrate content knowledge.
- ⊙ Support: You will be assessed on the extent to which you provide a coherent, fully supported response. Your response should provide evidence for any assertions you make.

Even though your writing ability will not be directly assessed, please take care to write an essay that is as free of grammatical errors as possible.

**MATH**

**SAMPLE ESSAY QUESTION**



Using your knowledge of algebra and geometry:

- ⊙ Write an expression for the area of the trapezoid based using the formula: area = half the sum of the bases times the altitude
- ⊙ Write an expression for the area of the trapezoid in terms of the area of its component parts (the three triangles)
- ⊙ Set these two expressions equal and show that this leads to a proof of the Pythagorean theorem

**SAMPLE RESPONSE**

The expression for the area of the trapezoid would be:

$$A = \frac{1}{2}(b_1 + b_2)(h) = \frac{1}{2}(a+b)(a+b) = \frac{1}{2}(a^2 + 2ab + b^2) = \frac{1}{2}a^2 + ab + \frac{1}{2}b^2$$

To determine the area of the trapezoid by adding the sum of the areas of each triangle, we use the formula $A = \frac{1}{2}bh$ :

$$A = \frac{1}{2}ab + \frac{1}{2}ab + \frac{1}{2}c^2$$

By setting the two expressions equal to each other, we prove the Pythagorean Theorem:

$$\frac{1}{2}a^2 + ab + \frac{1}{2}b^2 = \frac{1}{2}ab + \frac{1}{2}ab + \frac{1}{2}c^2$$

$$\frac{1}{2}a^2 + ab + \frac{1}{2}b^2 = ab + \frac{1}{2}c^2$$

$$\frac{1}{2}a^2 + \frac{1}{2}b^2 = \frac{1}{2}c^2$$

$$a^2 + b^2 = c^2$$

**Rationale**
The response is considered to be good because it demonstrates the respondent's knowledge of the subject matter (algebra and geometry) and addresses the specific questions asked by the test. The thinking behind the process and the derivation of the answers are fully explained in a clear and concise manner. All areas of the calculations and proof are covered.

## SCIENCE

## SAMPLE ESSAY QUESTION

Discuss the scientific process.

**SAMPLE RESPONSE**

Science may be defined as a body of knowledge that is systematically derived from study, observations, and experimentation. Its goal is to identify and establish principles and theories that may be applied to solve problems. Pseudoscience, on the other hand, is a belief that is not warranted. There is no scientific methodology or application. Some of the more classic examples of pseudoscience include witchcraft, alien encounters, or any topic that is explained by hearsay.

Scientific theory and experimentation must be repeatable. It is also possible to be disproved and is capable of change. Science depends on communication, agreement, and disagreement among scientists. It is composed of theories, laws, and hypotheses.

Theory - the formation of principles or relationships that have been verified and accepted.

Law - an explanation of events that occur with uniformity under the same conditions (laws of nature, law of gravitation).

Hypothesis - an unproved theory or educated guess followed by research to best explain a phenomena; a theory is a proven hypothesis.

Science is limited by the available technology. An example of this would be the relationship of the discovery of the cell and the invention of the microscope. As our technology improves, more hypotheses will become theories and possibly laws. Science is also limited by the data that is able to be collected. Data may be interpreted differently on different occasions. Science limitations cause explanations to be changeable as new technologies emerge.

The first step in scientific inquiry is posing a question to be answered. Next, a hypothesis is formed to provide a plausible explanation. An experiment is then proposed and performed to test this hypothesis. A comparison between the predicted and observed results is the next step. Conclusions are then formed, and it is determined whether the hypothesis is correct or incorrect. If incorrect, the next step is to form a new hypothesis and the process is repeated.