EC-6 Generalist Sample Items

1. A first grade teacher displays the 25 basic high frequency words on a word wall. Students are expected to spell the words correctly in their daily writing journals. During station time, students participate in activities that require them to practice writing the word wall words. The teacher is developing which skill?

A. ☐ Alphabetic Principal Skills  
B. ☐ Word Analysis and Identification Skills  
C. ☐ Reading Comprehension Skills  
D. ☐ Writing Conventions Skills

The correct answer is B. Knowing sight words is a word identification skill (they can identify the word correctly).

2. A kindergarten teacher places a bowl of marbles, a melon scooper, and an ice cube tray at a math center. The students are instructed to use the melon scooper to place one marble in a given number of compartments of the ice cube tray. The mathematical concept the teacher is most likely teaching is –

A. ☐ Addition  
B. ☐ Subtraction  
C. ☐ One to one correspondence  
D. ☐ Sorting

C is the correct answer. 
• The teacher is most likely helping the students develop the concept of one-to-one correspondence by having them place one marble in a compartment for each given number.

3. The Erie Canal, linking Albany and Buffalo as well as the Atlantic Ocean and the Great Lakes:

A. ☐ was paid for wealthy European investors  
B. ☐ was an economic disaster  
C. ☐ greatly increased American agricultural exports to Europe  
D. ☐ was the last major canal built in the U.S. but is no longer used

C is the correct answer. 
• The completion of the Erie Canal significantly increased the export of food, particularly
Midwestern wheat, to England. The Canal, financed mainly by state-backed bonds, was very successful, reduced transportation costs by over 90%, and inspired the construction of other canals throughout the U.S. It is still used today, though mainly for recreation.

4. The British policy of mercantilism in the 18th Century did not contain which of the following premises?

A. Colonies should provide raw materials for Britain
B. Colonies can trade with any European nation
C. The more gold and silver Britain had in its treasury the stronger a world power it was
D. Colonies should serve as markets for Britain's Exports

B is the correct answer.

- Mercantilism was the economic policy prevalent in Europe in the 17th and 18th centuries. A nation's prosperity was determined through its regulation of trade as well as colonies in its possession that were seen as both sources of raw materials and as markets for exported goods from Britain. Furthermore, wealth was measured by the amount of currency (gold and silver) in a nation's treasury. Colonial trade was to be strictly controlled by Britain. Mercantilist policies, such as the Navigation Acts, led to resentment among the American colonists in the last half of the 18th century.

5. Students will construct a timeline of important documents and government structures that influenced the creation of representative democracy and the protection of individual rights in the United States. Students will include all of the following on their timeline EXCEPT:

A. Magna Carta
B. The French Bill of Rights
C. Virginia House of Burgesses
D. Mayflower Compact

B is the correct answer.

- Students will be taught that England, not France, had a major impact on our Founding Fathers and the documents they created-the Declaration of Independence, the US Constitution and the Bill of Rights. Instead of respecting individual rights and representative government, France had a centralized government with a monarchy controlling the majority of the power during the time of our American Revolution and Constitutional Convention.

6. A second grade teacher, Mrs. Gomez, shares historical photographs, streaming video, ebooks, and news articles with the class for each unit of study. During each lesson, the class identifies the purpose of the media they are viewing, such as informational or for entertainment. This is an example of:
A. Providing students with opportunities to use technology to produce various types of communications.
B. Teaching students how to select, organize, and produce visuals to complement and extend meanings.
C. Understanding the characteristics and functions of different types of media.
D. Teaching students the steps and procedures for producing visual images and messages with various meanings to communicate with others.

The answer is C. The teacher is showing students a variety of media and discussing the different characteristics and kinds of media they are viewing. They are not producing different media, nor are the students selecting or producing any messages. They are engaged in understanding the media only.

7. Third grade students have completed units of study on tall tales, legends, and fables. The teacher guides students in developing an anchor chart that displays the features of each type of genre. Students complete a writing activity in which they compare and contrast two of their favorite stories from different genres. Through these activities, the teacher is promoting which skill?
A. Oral Language
B. Word Analysis and Identification
C. Alphabetic Principle
D. Literacy Development

The answer is D. Students are understanding features of genres, an important component of literacy development. Although they are discussing the genres, this is not specifically oral language development. They are not working on word analysis or identification (broader than words) and they are not targeting alphabetic principle.

8. Mrs. Watson, a second grade teacher, has assessed her students and has them reading daily in independent-level materials. They also read orally from stories previously read with the teacher at the teacher table. Students partner read and practice reader’s theaters that will be performed for their buddy class at a later date. Students chart their silent reading time daily, with the objective to read silently for longer periods of time each day. The purpose of these activities is to promote:
A. Phonemic Awareness
B. Reading Fluency
C. Alphabetic Principle
D. Oral Language Development

The answer is B.
Students are engaging in independent level materials, reading stories multiple times, engaging in reader’s theater, and reading for longer periods of time each day. All of these activities are designed to increase a student’s reading fluency. There is no focus on individual phonemes (phonemic awareness) or letters of the alphabet. Nor is the focus restricted to oral language.

9. **While reading a non-fiction book on sharks in small group, the teacher provides direct instruction on the use of text features, such as the table of contents, headings, and glossary. The primary instructional purpose for this activity is to provide:**
   A. Students with opportunities to engage in silent reading and extended reading of a wide range of materials, including expository texts and various literary genres.
   B. Instruction to increase students’ reading vocabulary.
   C. Strategies for decoding increasingly complex words.
   D. Instruction in comprehension skills transitions students from “learning to read” to “reading to learn”.

The answer is D. It cannot be A because the question focuses on what the teacher is doing in direct instruction. The features of print will not increase their vocabulary, as in B. And the text features are not decoding strategies. The text features are to help students use comprehension skills with nonfiction texts.

10. **Mrs. Langdon, a second grade teacher, models a mini-lesson on adding more details during writing time. Past lessons have covered topics such as making a plan for writing and writing a first draft. After her lesson today, she will conference with students in small groups and individually to help them add more details to their writing. What stage of writing is the primary focus of this lesson?**
   A. Revising
   B. Drafting
   C. Editing
   D. Prewriting

Answer is A. Revising pertains to adding/changing ideas (details) of a draft after it has been drafted. Since they are adding more details, this makes it revising. Drafting would be “writing a first draft” – what is described as past lessons. And Editing refers to correcting the mechanics and conventions of writing. Prewriting is making a plan/gathering ideas.

11. **Which energy transformation below best describes what happens when logs in a fireplace are burned?**
   A. Mechanical energy is transformed into kinetic energy.
   B. Chemical energy is transformed into thermal energy.
   C. Kinetic energy is transformed into chemical energy.
D. Thermal energy is transformed into chemical energy.

The answer is B.
The logs are transformed into heat (thermal energy).

12. **The best definition of an algorithm is** –

A. A systematic step by step procedure to solve a class of problems.

B. The necessary steps to solve addition, subtraction, multiplication or division problems.

C. An important pre-algebra technique to build conceptual understanding.

D. A fundamental process of Euclidean geometry.

The answer is A.

An algorithm is a step by step procedure to solve problems.
It can be more than addition, subtraction, multiplication or division problems, so that
eliminates B. It is a procedural understanding rather than conceptual, eliminating C.
And Euclidean geometry is about theorems and axioms.

13. **A class is studying life cycles of insects. After observing butterfly development**
with live specimens, the teacher would like the students to create an analogy for
each stage of the butterfly life cycle. The teacher asks the students use the school
when making the analogies. An appropriate analogy for the larval stage of a
butterfly life cycle is that it is like:

A. Kindergarten because it is the beginning of the life cycle.

B. The office because it manages the whole life cycle.

C. Gym class because it is the part of the life cycle that involves movement.

D. The cafeteria because it is where the butterflies gets most of its food.

The answer is D.
The larval stage is where butterflies get most of their food.

14. **A recipe for cupcakes calls for 2 cups of flour and makes 12 cupcakes. What is**
the ratio of flour to cupcakes?

A. 12:2

B. 6:1

C. 1:6

D. 1:4

The answer is C.
2 cups flour to 12 cupcakes is 2:12 or 1:6 when reduced.

15. Ms. Gomez sets up the following activity in her first grade classroom:

- 10 students are given a number card
- Each number card has a match
- The 10 students line up in front of the class with their cards facing away from the students
- The remaining students in the class call out pairs to show their cards to see if they match, such as, “The fourth student and the eighth student.” Students must name cards to be displayed by position.

Ms. Gomez has most likely set up the activity to help students learn –

A. Skip counting
B. Ordinal numbers
C. Whole numbers
D. Place value

The answer is B.
Ordinal numbers are “fourth” and “eighth”.
This is not skip counting and is not whole numbers or place value.

16. Mr. Ward makes a web diagram on the board leaving the center circle blank. Branching off of the center circle are the following statements; “legal protection of private property”, “limited government protection”, “abundant natural resources” and “colonists looking for economic opportunity”. Which of the following completes the center circle of the graphic organizer?

A. Growth of British Mercantilism
B. Development of free enterprise in America
C. Reasons for a decentralized government
D. Characteristics of the Columbian Exchange

The answer is B. The biggest hint there is “colonists looking for economic opportunity” – as this cannot be tied to any of the other answers. But the other statements are also related to the development of free enterprise in America and not necessarily tied to the other answer choices (for example, C is not tied to “abundant natural resources” and A is not tied to “the colonists looking for economic opportunity” and D is tied to Christopher Columbus and the widespread exchange of plants, animals and other items including diseases.

17. Which of the following best explains why a Ku Klux Klan march through the streets of Houston and a protest at the Lincoln Memorial in Washington D.C. to
protest the stimulus package and the healthcare bill are both protected by the First Amendment?

A. Parades and rallies are only protected at the local level.
B. The First Amendment only protects the right to peaceably assemble in large cities despite the purpose of the gathering.
C. The First Amendment protects the right of all groups to peaceably assemble regardless of their popular or unpopular viewpoints.
D. The First Amendment does not protect either of these forms of assembly.

The answer is C. It cannot be A because the question shows local and federal protections (Houston and Washington DC). It is not B because you can assemble anywhere (not just in large cities). It is C, despite their viewpoint, the KKK has the right to assemble. It cannot be D because both marches are protected.

18. Mr. Smith creates this riddle:

   Earth Process Riddle
   These are all examples of me:
   - Break rocks into small particles that form soil
   - Wear away building material
   - Water freezes in cracks of rocks; the rocks split
   - Plant roots causing bits of rock to break away

   What am I?

He creates the riddle above as a warm up for his students to review the concepts from the previous day’s lesson. Which earth process did the class most likely study in the previous lesson?

A. Erosion
B. Weathering
C. Sedimentation
D. Frost Heaving and Wedging

The answer is B: Weathering. Weathering is the breaking down of rocks, soils and minerals as well as artificial materials through contact with the Earth’s atmosphere, biota and waters. Weathering occurs in situ, or "with no movement", and thus should not be confused with erosion, which involves the movement of rocks and minerals by agents such as water, ice, snow, wind and gravity.
It is not C—sedimentation is the tendency for particles in suspension to settle out of the fluid in which they are entrained, and come to rest against a barrier.

It is not D—Frost weathering, frost wedging, ice wedging or cryofracturing is the collective name for several processes where ice is present. These processes include frost shattering, frost-wedging and freeze-thaw weathering. This type of weathering is common in mountain areas where the temperature is around the freezing point of water. Certain frost-susceptible soils expand or heave upon freezing.

19. **As part of a data collection project, a science group wants to conduct a survey to answer the question “Which type of snack food do fourth grade students prefer?”**

   The best method for collecting this information is to –

   A. [ ] ask the vending machine company how many of each type of snack is sold each day
   B. [ ] send home a parent survey asking what type of snack they buy
   C. [ ] interview students about which kind of snack they like best
   D. [ ] count the number of wrappers found in the garbage can for each type of snack

   The answer is C.

   Interviewing students is the best and most direct method for finding out what kind of snack students prefer.

   Answer A may indicate which snack is most popular, but not among 4th graders.

   Answer B -- A parent survey may give you information on what snacks they buy but that might not be 4th graders’ favorite snack.

   And answer D is inaccurate because students may not throw away their wrappers in the same garbage can every day.

20. **The purpose of a flower on a plant is to attract pollinators. Pollinators serve what purpose for the plant?**

   A. [ ] Assist with sexual reproduction.
   B. [ ] Provide a food source.
   C. [ ] Attract helpful insects.
   D. [ ] Add essential nutrients.

   The answer is A.

   Pollinators assist with sexual reproduction.

   It cannot be answer B because soil provides a food source.

   Answer C – various parts of the plant may attract helpful insects, not just the pollinator.

   Answer D – essential nutrients are added through the stem from the soil.