Soil Ag Mag - Vocabulary
Recognizing Literary Devices

Directions: Literary devices are techniques authors use to create meaning through language. Read the definitions of the following literary devices. Then choose the best answer to the questions below.

LITERARY DEVICES
Hyperbole - a figure of speech which is an exaggeration.
Onomatopoeia - the use of words whose sounds make you think of their meanings.
Personification - giving human qualities, feelings, action, or characteristics to non-living things such as objects or elements of nature.
Simile - a comparison using the words “like” or “as”.

1. “The beating rain sounded like a baby beating on a pot” is an example of which type of literary device?
A Simile
B Metaphor
C Personification
D Hyperbole

2. “The wind whispered through the open window and up her neck” is an example of which type of literary device?
A Onomatopoeia
B Personification
C Simile
D Hyperbole

3. What is the main literary device Langston Hughes used in the lines from his poem, “April Rain Song”?
"Let the rain kiss you
Let the rain sing you a lullaby"
A Simile
B Metaphor
C Personification
D Hyperbole

4. What is the main literary device used here:
“The hot chocolate burned my tongue like a flame.”
A Onomatopoeia
B Simile
C Personification
D Hyperbole
Soil Ag Mag - Vocabulary
Recognizing Literary Devices

Directions: Literary devices are techniques authors use to create meaning through language. Read the definitions of the literary devices. Then choose the best answer to the questions below.

5 Which is an example of onomatopoeia?
  A  Go
  B  Now
  C  Walk
  D  Pop

6 Which is an example of hyperbole?
  A  Whispering trees
  B  She is as big as a house
  C  Love is a rose
  D  Like sparkling stars

7 Which is an example of personification?
  A  Deirdre shook the sugar
  B  Life is a dream
  C  Life is like a jar of jam
  D  Whispering willows

8 Which is an example of simile?
  A  Deirdre shook the sugar
  B  Life is a dream
  C  Life is like a jar of jam
  D  Whispering willows

9 Which is an example of personification?
  A  Barry bought beautiful bunches of flowers.
  B  The door thumped closed.
  C  The hare flipped his ear coyly in my direction.
  D  Her mind was sharper than a piece of glass.

10 Which is an example of onomatopoeia?
  A  Barry bought beautiful bunches of flowers.
  B  The door thumped closed.
  C  The hare flipped his ear coyly in my direction.
  D  Her mind was sharper than a piece of glass.
Soil Ag Mag - Math - Number Sequences

Directions: Choose the best answer.

1. What number is missing from the following pattern?
   4, 10, _____, 46, 94, 282
   A 16  
   B 22  
   C 28  
   D 34

2. What number is missing from the following pattern?
   162, 54, _____, 6, 2
   A 12  
   B 29  
   C 18  
   D 10

Use the table below to answer questions 3 and 4.

<table>
<thead>
<tr>
<th>A</th>
<th>9</th>
<th>18</th>
<th>36</th>
<th>45</th>
<th>63</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>6</td>
<td>9</td>
<td>15</td>
<td>18</td>
<td></td>
</tr>
</tbody>
</table>

3. What number should go in Row A in the third box?
   A 21  
   B 16  
   C 42  
   D 27

4. What number should go in Row B in the fourth box?
   A 10  
   B 12  
   C 16  
   D 11
Soil Ag Mag - Math - Number Sequences

Directions: Choose the best answer.

Soil samples are taken each day for seven days in two fields to determine the level of nitrogen. Use the data in the table below to answer questions 5 - 8.

<table>
<thead>
<tr>
<th>Day</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field 1</td>
<td>75</td>
<td>67</td>
<td>53</td>
<td>51</td>
<td>45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field 2</td>
<td>65</td>
<td></td>
<td>49</td>
<td>41</td>
<td></td>
<td>33</td>
<td></td>
</tr>
</tbody>
</table>

5. What two numbers are missing from Field 1 Day 3 and Day 7?
   A. 59 and 43
   B. 50 and 34
   C. 66 and 44
   D. 54 and 50

6. How are the numbers in Field 1 related to the numbers in Field 2?
   A. Each number is divided by 3
   B. Each number is increased by 15
   C. Each number is decreased by 10
   D. Each number is multiplied by 6

7. What number belongs in Field 2 on Day 6?
   A. 94
   B. 35
   C. 40
   D. 36

8. What number is missing from the following pattern?
   4, 14, 54, ______, 854
   A. 94
   B. 114
   C. 164
   D. 214
Soil is everywhere. In the country, farmers plow the soil of their sprawling fields. In the city, people spade garden patches in their backyards. The sprawling prairies grow in the soil, as do deeply rooted forests with their high canopies of branches overhead. Even the drifting sands of the deserts hold enough soil to sustain cacti and succulents. The grass and trees in yards and neighborhood parks are rooted in soil. Your house or apartment is built upon the soil, as are sidewalks and streets. Soil has settled at the bottom of lakes, rivers, and oceans, and in the crevices of all but the highest mountain peaks. There is soil everywhere, both in far-off places and right under your feet.

Without soil there would be no life on Earth. We eat vegetables and fruit, as well as animals that feed on the grasses and grains grown in the soil. We make clothes from cotton, wool, and many other products that trace their roots back to the soil. Soil is as essential as the elements of water and air and as the energy of the sun.

Soil is made up of organic and inorganic—living and nonliving—ingredients. The inorganic material found in soil—clay, silt, and sand—began as rocks that have been worn down by wind and water over thousands of years. Rocks break apart when water collects in their cracks, then freezes and expands. Streams and rivers also wear down rocks, just as the ocean waves over time grind large stones into grains of sand on the beach.

Soil is also made up of organic materials that were once alive. If you pick up a handful of soil, you will be holding invisible bits of rotted leaves and grass and fragments of dead insects. The grasses and wildflowers of the prairies feed on the remains of plants that have died, just as the forest floor is covered with dead leaves that become humus—a dark, fragrant substance that feeds the trees reaching high into the sky. Earthworms, as well as bacteria and other small creatures, munch on this plant and animal matter and turn it into vital soil ingredients. Humus helps to stick crumbs of soil together, almost like glue, and enables it to hold water like a sponge.

The cycle of life, death, and decay in the soil continues to this very moment. Every second of every day soil is being made, just as it was millions of years ago. And if you make more soil, you’ll be helping to create a better world for all of us. However, every second of every day soil is also being lost—to wind, water, and the growth of cities. The next time you play in your backyard or the neighborhood park, think of the soil beneath your feet. It may not seem to be worth very much, but remember, soil is as precious as the wind in your face and the sun warming your shoulders.
Soil Ag Mag - Reading Passage

Directions: Read each question and choose the best answer.

1. Soil is as essential as the energy of ____________.
   A) The sun
   B) The water
   C) The air
   D) The animals

2. Without ____________ there would be no life on Earth.
   A) Water
   B) Food
   C) Soil
   D) Rivers

3. ____________ is a dark, fragrant substance that feeds plants, and is made from the remains of dead plants and animals.
   A) Sand
   B) Humus
   C) Silt
   D) Clay

4. Soil from the earth is lost due to which of the following?
   A) Wind
   B) Growth of cities
   C) Water
   D) All of the above
Soil Ag Mag - Reading Passage

Directions: Read each question and choose the best answer.

5. Clay, silt, and sand began as ______ that have been worn down over time by the elements.
   A. Soil  B. Plants  C. Rocks  D. Animals

6. ______ helps to enable soil to hold water like a sponge by sticking crumbs of soil together like glue.
   A. Silt  B. Clay  C. Sand  D. Humus

7. Where is soil?
   A. In the prairie  B. In the country  C. In the city  D. Everywhere

8. ______ has settled at the bottom of lakes, rivers and oceans.
   A. Plants  B. Soil  C. Humus  D. Animals

Extended Response—SOIL
Soil provides a place for plants to grow. Did you know that plants help to protect the soil as well? Discuss how plants protect the soil and ways that we can help plants protect the soil.