

### Chapter 3 Science Study Guide

- All rocks contain one or more minerals.
- Melted rocks that cool and harden are called igneous rocks.
- What are the ingredients of soil? humus, air, water, and rocks.
- Circle ALL of the examples that would cause a slow change to Earth's surface.
 

<input type="radio"/> A. Volcano	<input type="radio"/> C. Landslide	<input checked="" type="radio"/> E. Erosion
<input checked="" type="radio"/> B. Deposition	<input checked="" type="radio"/> D. Weathering	<input type="radio"/> F. Earthquake
- Circle ALL of the examples that would cause a rapid change to Earth's surface?
 

<input type="radio"/> A. <del>Erosion</del>	<input checked="" type="radio"/> F. Landslides
<input type="radio"/> B. <del>Weathering</del>	<input checked="" type="radio"/> E. Earthquakes
<input checked="" type="radio"/> C. Volcano	<input checked="" type="radio"/> G. Wildfires
<input checked="" type="radio"/> D. Floods	<input checked="" type="radio"/> H. Tsunamis
- What describes shaking of the ground caused by a sudden shift in Earth's crust? earthquake
- What property does this mineral show? cleavage



- What causes erosion?
 

<input type="radio"/> A. Wind
<input type="radio"/> B. Water
<input type="radio"/> C. Gravity
<input checked="" type="radio"/> D. All of the other answer choices
- Which is a type of mineral?
 

<input type="radio"/> A. Compost
<input type="radio"/> B. Igneous rock
<input type="radio"/> C. Loam
<input checked="" type="radio"/> D. Copper

10. Look at the table.

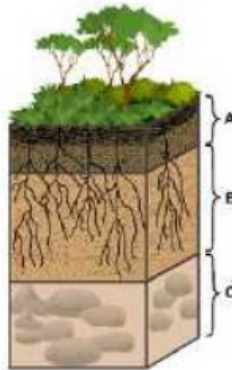
Column A	Column B
ocean	valley
river	plateau
lake	volcano

Which of the following could be a title for Column B?

- |   |   |
|---|---|
| <input type="radio"/> A. Bodies of water      | <input type="radio"/> C. Kinds of erosion |
| <input checked="" type="radio"/> B. Landforms | <input type="radio"/> D. Changes to Earth |

11. Carli wants to know the texture of a rock. What should she do?  
**A.** Look at it with a hand lens.  
 B. Put it in water.  
 C. Scratch it against a plate.  
 D. Hit it with a rock hammer.

12. Which is a way that valleys form?  
**A.** A river cuts through rock  
 B. Lava flowing from a volcano  
 C. Ocean waves move sand  
 D. Lava cools and hardens



13. Look at the image of soil layers. Label each layer.  
 A. **Topsoil** \_\_\_\_\_  
 B. **subsoil** \_\_\_\_\_  
 C. **bedrock** \_\_\_\_\_

14. Hannah is carrying out a composting experiment. She wants to find out which materials can turn into composted soil over time. She collects three compost bins and adds leaves to all three bins. She places newspaper in only two of the bins. She places aluminum foil in only the third bin. She sets up all three bins in a sunny part of the schoolyard. Each week, she uses a shovel to stir the contents of each bin. She also waters the bins regularly. Each month, she writes down what she sees in each bin. The table below shows her results.

Compost Bin	1 Month	2 Months	3 Months	4 Months
<b>Bin 1</b> Leaves only	Leaves	Leaves, soil	Soil	Soil
<b>Bin 2</b> Leaves, newspaper	Leaves, newspaper	Leaves, newspaper, soil	Newspaper, soil	Soil
<b>Bin 3</b> Leaves, newspaper, aluminum foil	Leaves, newspaper, aluminum foil	Leaves, newspaper, aluminum foil, soil	Newspaper, aluminum foil, soil	Aluminum foil, soil

Answer the questions about what she can conclude from her experiment

- A. Do all materials eventually become soil? **No** \_\_\_\_\_  
 B. Can newspaper be composted to form soil? **Yes** \_\_\_\_\_  
 C. About how long does it take for leaves to break down into soil? **2 months** \_\_\_\_\_  
 D. How long does it take for the aluminum foil to break down into soil? **It doesn't** \_\_\_\_\_