

Igneous Rocks

Multiple Choice

Identify the choice that best completes the statement or answers the question. Write the letter on the blank line to the left of the question.

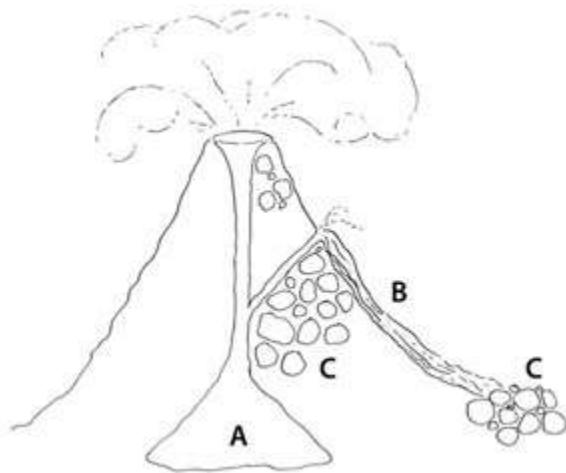
- _____ 1. Igneous rocks form from _____ when it cools.
 - a. magma
 - b. lava
 - c. neither a nor b
 - d. both a and b
- _____ 2. The molten material deep inside Earth from which igneous rocks form is called _____.
 - a. magma
 - b. lava
 - c. neither a nor b
 - d. both a and b
- _____ 3. Lava that cools quickly forms _____ rocks.
 - a. intrusive igneous
 - b. extrusive metamorphic
 - c. intrusive metamorphic
 - d. extrusive igneous
- _____ 4. A rock is always _____.
 - a. a mixture of minerals, organic matter, volcanic glass, or other materials
 - b. made of molten material
 - c. formed by heat and pressure
 - d. either igneous or sedimentary
- _____ 5. When lava cools at Earth's surface, _____ igneous rocks are formed.
 - a. coarse-grained
 - b. metamorphic
 - c. intrusive
 - d. extrusive
- _____ 6. When magma cools deep inside Earth, _____ igneous rocks are formed.
 - a. intrusive
 - b. fine-grained
 - c. detrital
 - d. extrusive
- _____ 7. Basaltic igneous rocks are _____.
 - a. light-colored
 - b. intrusive
 - c. rich in iron and magnesium
 - d. both a and b
- _____ 8. Rocks are formed when magma or lava _____.
 - a. erodes
 - b. undergoes radioactive decay
 - c. crystallizes
 - d. weathers
- _____ 9. Igneous rocks that cool slowly beneath Earth's crust are _____.
 - a. extrusive
 - b. sedimentary
 - c. intrusive
 - d. always magnetic
- _____ 10. Igneous rocks that cool quickly on Earth's surface are _____.
 - a. metamorphic
 - b. intrusive
 - c. extrusive
 - d. always magnetic
- _____ 11. The rock cycle can change the sedimentary rock into _____.
 - a. extrusive igneous rock
 - b. intrusive igneous rock
 - c. neither a nor b
 - d. both a and b
- _____ 12. Which is a tectonic process that forces rocks up from beneath Earth's surface?
 - a. melting
 - b. crystallization
 - c. deposition
 - d. uplift
- _____ 13. Rocks can change throughout many different processes through the rock cycle. All of the following change rocks on Earth's surface except _____.
 - a. compaction
 - b. weathering
 - c. deposition
 - d. melting

Name _____ Period _____

- ____ 14. The crystals that form in slowly cooled magma produce ____ mineral grains.
- | | |
|--------------|-----------------|
| a. tiny | c. fine-grained |
| b. invisible | d. large |

Short Answer (2 points each)

Use the diagram to answer the questions.



1. What is the difference between the substance identified as A and the substance identified as B?

2. What does the letter C represent and why is it located both within Earth and on Earth's surface?

3. What causes the difference in grain size between intrusive igneous rocks and extrusive igneous rocks?
