

Rocks and Minerals Assessment

DO NOT WRITE ON THIS TEST!!!

Directions: Write the letter of the correct answer choice on your answer document.

1. (S6E5c) Which of the following statements is TRUE?
 - a. All minerals are made of rocks.
 - b. Rocks and minerals are the same.
 - c. All rocks are made of minerals.
 - d. All of the above
2. (S6E5c) Which of the following statements is TRUE?
 - a. Rocks can break down into sediments
 - b. New rocks form over time
 - c. Rocks can change from sedimentary to metamorphic
 - d. All of the above
3. (S6E5c) Which one of the following words is used to classify rocks based on how they formed?
 - a. Igneous
 - b. Mineral
 - c. Granite
 - d. Transparent
4. (S6E5c) You discover that a rock you are testing formed 20 years ago. In what group would this rock MOST LIKELY belong?
 - a. Metamorphic
 - b. Igneous
 - c. Sedimentary
5. (S6E5c) If you wanted to duplicate conditions in a laboratory that produced sedimentary rock, what would you need to do?
 - a. Apply high pressure to small particles of rock
 - b. Apply heat to small particles of rock
 - c. Apply heat and pressure to small particles of rock
 - d. Let the particles stand under water for a few weeks
6. (S6E5c) Metamorphic rocks form from
 - a. Layers of sediment being cemented together
 - b. Cooling magma
 - c. Heat and pressure causing types of rocks to change form
 - d. All of the above
7. (S6E5c) If you wanted to duplicate conditions in a laboratory that produced metamorphic rock from sedimentary rock, what would you need to do?
 - a. Apply high pressure to the rock
 - b. apply high temperature to the rock
 - c. apply high pressure and high temperature to the rock
 - d. let the rock stand under water for a long time
8. (S6E5c) Which of the following is a metamorphic rock?
 - a. Granite
 - b. limestone
 - c. sandstone
 - d. marble
9. (S6E5c) Which of the following is an igneous rock?
 - a. Granite
 - b. Limestone
 - c. Sandstone
 - d. marble

10. (S6E5c) Which of the following is a sedimentary rock?

- a. Granite
- b. Gneiss
- c. Sandstone
- d. Marble

11. (S6E5c) Which kind of rock forms from material that settles on the ocean floor?

- a. Igneous
- b. Metamorphic
- c. Sedimentary
- d. lava

12. (S6E5c) Why does magma tend to rise toward Earth's surface?

- a. It is more dense than surrounding rocks.
- b. It is more massive than surrounding rocks.
- c. It is cooler than surrounding rocks.
- d. It is less dense than surrounding rocks.

13. (S6E5c) Which rock has large mineral grains?

- a. Granite
- b. Obsidian
- c. Basalt
- d. Pumice

14. (S6E5c) Which type of metamorphic rock is shown in this picture?

- a. Foliated
- b. Intrusive
- c. Nonfoliated
- d. Extrusive



15. (S6E5c) What sedimentary rock is made of large, angular pieces of sediment?

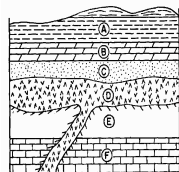
- a. Conglomerate
- b. Limestone
- c. Breccia
- d. Chalk

16. (S6E5c) Sedimentary rocks are classified according to their grain size. Which of these is a measure of grain size?

- a. Grams
- b. Centimeters
- c. Milliliters
- d. Meters per second

17. (S6E5c) The diagram below is a geologic cross-section of an area where a river has exposed a cliff of rock layers. According the picture, which rock layer is the oldest?

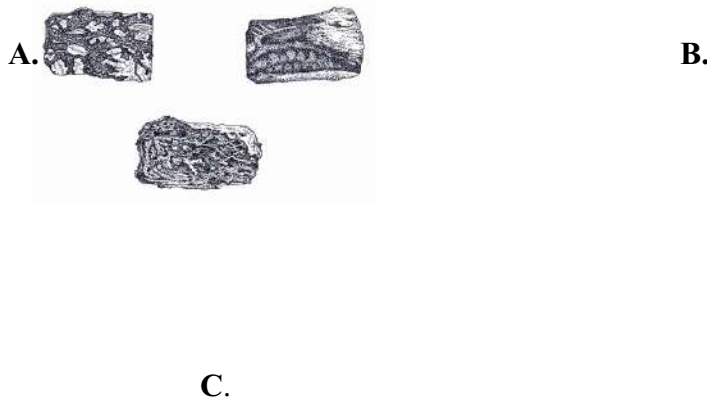
- a. A
- b. B
- c. C
- d. D



18. (S6E5b) _____ are nonliving, solid materials found naturally on Earth. They are composed of one or more minerals and other natural materials.

- a. Minerals
- b. Grass
- c. Rocks
- d. Trees

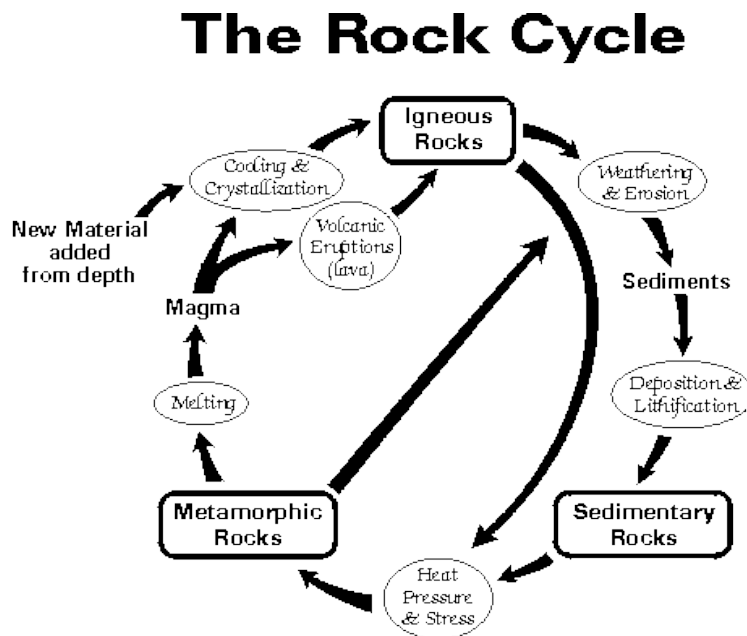
19. (S6E5c) The size of crystals in igneous rock can be determined by how fast the magma cools and solidifies. The faster the magma cools, the smaller the crystals. Which sample of granite formed from magma that cooled and hardened at the slowest rate?



20. (S6E5b) Galena is ranked 2.5 on Moh's scale. Magnetite is ranked 6. Which mineral will scratch the other mineral?
- Galena
 - Magnetite
21. (S6E5b) A mineral is a naturally occurring, inorganic, crystalline solid with a definite chemical composition. Which of the following is not a mineral?
- Calcite
 - Quartz
 - Coal
 - Talc
22. (S6E6b) All of the following are nonrenewable resources except _____.
- Coal
 - Trees
 - Rocks
 - Natural gas
23. (S6E5b) What is the measure of how easily a mineral can be scratched?
- Luster
 - Cleavage
 - Hardness
 - Fracture
24. (S6E5b) Which of the following must crystalline solids have?
- Carbonates
 - Orderly arrangement of atoms
 - Cubic structures
 - Cleavage
25. (S6E5b) Which is the hardest on Mohs scale?
- Talc
 - Diamond
 - Quartz
 - Feldspar
26. (S6E5b) Which property describes how clearly you can see through a mineral?
- Transparency
 - Streak
 - Luster
 - Cleavage
27. (S6E5c) You find a rock in the backyard that contains fossils. What type did you find?
- Igneous
 - Sedimentary
 - Metamorphic
 - Intrusive

28. (S6E5c) Why will fossils only be found in one type of rock?
- Sedimentary rocks like animals and plants
 - There is too much heat and/or pressure when igneous and metamorphic rock forms.
 - There were only sedimentary rocks on Earth when fossils formed
 - Metamorphic rocks are ugly.
29. (S6E5c) You find an igneous rock that is smooth and contains no visible mineral grains. What have you probably found?
- Extrusive igneous rock
 - Intrusive igneous rock
 - foliated
 - nonfoliated
30. (S6CS1a) Which of the following is not a scientific observation?
- Sara saw that the soil was dark brown
 - Sara counted the number of days it rained
 - Sara thinks the soil is too dry to grow plants
 - Sara's thermometer showed the temperature is 25°C

Directions: Use the chart below to answer questions 32-34 (S6E5c).



31. The rock cycle describes how rocks:
- Change over time
 - Are destroyed
 - form
 - all of the above
32. In order for a metamorphic rock to become an igneous rock, it must
- Melt and cool
 - Undergo heat and pressure
 - weather and erode
 - become sediment
33. A rock that has been weathered and eroded becomes _____.
- Magma
 - Igneous
 - sediment
 - metamorphic

Vocabulary: Match the following vocabulary words with the correct definition. Write the letter of the correct vocabulary word.

A. Nonrenewable resource

C. renewable resource

B. crystalline structure

Vocabulary: Match the following vocabulary words with the correct definition. Write the letter of the correct vocabulary word.

- A. Nonrenewable Resource**
- B. Property**
- C. Minerals**
- D. Crystalline Structure**
- E. Renewable Resource**

34. _____ are non-living material found naturally on earth with specific crystalline structures.
35. _____ describes the internal arrangement of a mineral's atoms.
- 36.A _____ is any material found naturally on earth, used by people, and can be replaced within a lifetime.
- 37.A _____ is any material found naturally on earth, used by people, and cannot be replaced within a lifetime.
- 38.A _____ is any feature or characteristic that makes something unique or different.

Directions: On the back of your answer document, answer at least two of the following questions in complete sentences.

39. Look at the rock cycle diagram. Discuss three ways that rocks can be **destroyed** on Earth.
40. Explain how sediments become **compacted & cemented** together to form a sedimentary rock.
41. Explain the difference between foliated and nonfoliated metamorphic rock.
42. Explain **2** differences between intrusive and extrusive igneous rock.