

Sixth Grade Science unit 1 Assessment

1. If a rock is like a cake, what are minerals like?

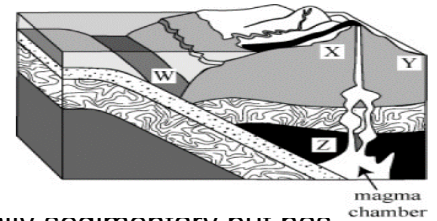
- A. the ingredients B. an oven C. the icing D. a pan

2. Joe finds a rock and notices it has a fossil in it. What classification of rock would this most likely be?

- A. igneous B. metamorphic C. mineral D. sedimentary

3. The cross section below shows four different areas where rocks may form. A metamorphic rock would most likely form in which area of the diagram.

- A. W B. X C. Y D. Z



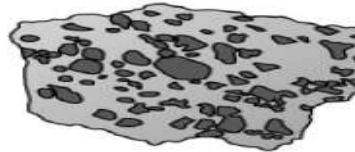
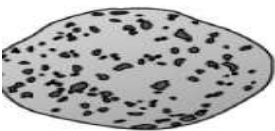
4. Most of the rock material of the Great Smoky Mountains was originally sedimentary but has been changed over time due to heat and pressure. Which type of rock now makes up the Great Smoky Mountains?

- A. igneous C. metamorphic
B. metallic D. sedimentary

5. Sara is on vacation in Hawaii and finds a rock she wants to keep as a souvenir. Which type of rock did she most likely find?

- A. igneous C. metamorphic
B. metallic D. sedimentary

6. Use the diagram below to answer questions 10 and 11. Three igneous rock are pictured below:
Sample A Sample B Sample C



7. Based on your observations, which rock would most likely be an extrusive igneous rock?

- a. Sample A c. Sample C
b. Sample B d. Both A and C

8. Which of the rocks in the diagram above took the longest to cool?

- A. Sample A B. Sample B C. Sample C
d. Both A and C

9. Which type of rock cools quickly and appears to have a surface formed of air holes?

- A. extrusive igneous C. metallic mineral
B. foliated metamorphic D. clastic sedimentary

10. Which process of the rock cycle is least likely to occur near Earth's surface?

- A. compacting B. cooling C. melting D. weathering

11. Metamorphic rocks are considered the most dense of the 3 rock types. Why is this true?

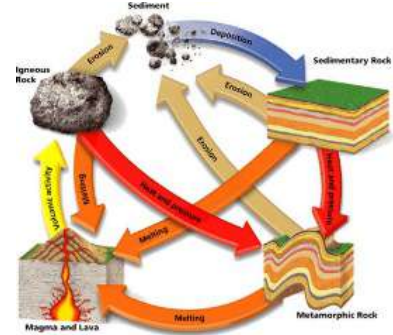
- A. Melting combines layers C. Cementation glues sediments together
B. Cooling causes minerals to form D. Heat and pressure compacts materials

12. Which of the following forms grains of sediment into Sedimentary rock?

- A. compaction and cementation
- B. metamorphosis
- C. melting
- D. solidification

13. A student shakes a jar filled with handfuls of sand, soil, pebbles, and water. Which type of rock formation does this experiment best model?

- A. igneous
- B. metamorphic
- C. sedimentary
- D. volcanic



14. The picture above models which of the following?

- A. How all rocks started as metamorphic rocks
- B. What happens inside of earth's core
- C. How one classification of rock can change into any other classification of rock
- D. The process of how minerals form

15. In the photo shown, there is a person floating in the water of the Dead Sea. Why does this person not sink?

- A. He is not a very heavy person.
- B. This person must be lying on a sand bank
- C. The density of the saltwater is greater than the man's density.
- D. His body is more dense than the density of the saltwater.



16. Timothy is looking at his house made of brick and glass windows. He knows that brick and glass are made from items found within the earth. Timothy claimed that these were minerals; why is Timothy wrong?

- A. Minerals are naturally occurring, and brick and glass are man made
- B. Brick and glass are made from rock, and rocks have nothing to do with minerals
- C. Bricks and glass are organic
- D. Minerals take too long to form to make houses out of them

17. If mineral A can scratch mineral B, then mineral A is _____ than mineral B.

- A. Softer
- B. Harder
- C. Pointier
- D. More dense

18. Lucy is looking at a mineral and said to her friend "Wow, this shines like a piece of glass!" What property of minerals is she observing?

- A. Hardness
- B. Streak
- C. Luster
- D. Color

19. Which of the following is NOT a characteristic of a mineral?

- A. Crystal structure
- B. Naturally occurring
- C. Solid
- D. Organic

20. These 3 minerals are all the same size and shape. When the mass of each was taken these were the results: A- 5 grams B- 15 grams C- 25 grams

Why are their masses different?

- A. Different densities
- B. Different crystal shapes
- C. Different lusters
- D. Different textures

Short answer questions

21. Using your own words, analyze and explain what would happen to the rock cycle if we took out metamorphic rocks leaving only igneous and sedimentary?
22. In your own words, explain how a hot air balloon works.