

Name _____ Parent Signature _____

Minerals Study Guide

1. List the 5 characteristics of minerals:

- A.
- B.
- C.
- D.
- E.

2. List and define the 6 physical properties of minerals. (Also used to test minerals.)

Property	Definition
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

3. Explain the 3 ways in which minerals can form.

- A. Precipitates - _____
- B. Evaporates - _____
- C. Magma/Lava - _____

4. A student observes that an unknown mineral scratches a glass plate (hardness 5.5) and a sample of quartz (hardness 7). What else does the student know about the unknown mineral?

- A. Its hardness is between 5.5 and 7.
- B. Its hardness is greater than 7.
- C. Its hardness is less than 7.
- D. Its hardness is less than 5.5.

5. Which property causes halite to break into cubes? _____

6. Pyrite is metallic in appearance. This describes which property? _____

7. Which property of minerals does Mohs scale measure? _____

8. Of the following minerals: mica, diamond, gypsum, and copper, which is an example of a gemstone?

9. Which family of minerals is the most common? _____

10. Classify the following as mineral or nonmineral: If a nonmineral, explain why?

- a. Fossils
- b. Sulfur
- c. Pyrite
- d. Sugar
- e. plastic

11. What is the difference between a rock and a mineral?

12. Imagine that you are trying to determine the identity of a mineral. You decide to do a streak test. You rub the mineral across the streak plate, but the mineral does not leave a streak. Has your test failed? Explain.

13. Why would cleavage be important to gem cutters, who cut and shape stones?

14. Imagine that you work at a jeweler's shop and someone brings in some gold nuggets for sale. You are not sure if the nuggets are real gold. Which identification tests would help you decide whether the nuggets are gold?

15. Which property of minerals is the least reliable? Why?

16. Suppose you are in a desert. You are walking across the floor of a dry lake, and you see crusts of cubic halite (rock salt) crystals. How do you suppose the halite crystals formed? Explain your answer.

17. How does the rate of cooling lava and magma affect crystal size?

Place the following terms/phrases into the concept map below: how they form, crystal, evaporites, color, properties, luster, precipitates, hardness, streak, cooling of lava or magma, mineral, *cleavage / fracture*

