

Name: \_\_\_\_\_ Score: \_\_\_\_\_/110

# Rocks and Minerals Test

There are 50 questions on this test and each question is worth 2 points unless stated otherwise.  
You will have 50 minutes to complete the test. Good luck!

For questions 1-9, please identify the rock/mineral (1 point) and it's group/classification (1 point):



1. \_\_\_\_\_  
\_\_\_\_\_



2. \_\_\_\_\_  
\_\_\_\_\_



3. \_\_\_\_\_  
\_\_\_\_\_



4. \_\_\_\_\_  
\_\_\_\_\_



5. \_\_\_\_\_  
\_\_\_\_\_



6. \_\_\_\_\_  
\_\_\_\_\_



7. \_\_\_\_\_  
\_\_\_\_\_



8. \_\_\_\_\_  
\_\_\_\_\_



9. \_\_\_\_\_  
\_\_\_\_\_

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10. Classify the following rocks as igneous, sedimentary, or metamorphic. (Each answer is 1 point for 6 points total)

Garnet schist, chert, diorite, gneiss, conglomerate, rhyolite

Igneous: \_\_\_\_\_

Sedimentary: \_\_\_\_\_

Metamorphic: \_\_\_\_\_

11. Please number the following minerals from lightest (1) to heaviest (5) according to specific gravity.

(Each answer is 1 point for 5 points total)

Kaolinite \_\_\_\_\_ Copper \_\_\_\_\_ Bornite \_\_\_\_\_ Opal \_\_\_\_\_ Goethite \_\_\_\_\_

12. Please number the following minerals from softest (1) to hardest (5) according to Moh's hardness scale.

(Each answer is 1 point for 5 points total)

Lepidolite \_\_\_\_\_ Topaz \_\_\_\_\_ Olivine \_\_\_\_\_ Corundum \_\_\_\_\_ Talc \_\_\_\_\_

13. Which list the sequence of ferromagnesian silicate minerals crystallizing from a cooling magma?

- a. Biotite, pyroxene, amphibole, olivine
- b. Olivine, amphibole, pyroxene, biotite
- c. Olivine, pyroxene, amphibole, biotite
- d. Biotite, amphibole, pyroxene, olivine

14. Which of these minerals is more likely to contain iron oxide?

- a. Sodalite
- b. Hematite
- c. Kaolinite
- d. Chalcopyrite

15. \_\_\_\_\_ is characterized by very coarse mineral grains.

- a. Pumice
- b. Obsidian
- c. Pegmatite
- d. Barite

16. Where is gold formed?

- a. Inside Earth's inner core
- b. Inside the magma chambers of volcanoes
- c. Inside a supernova explosion
- d. Inside Earth's outer core

For questions 17-22, please match rock/mineral with the correct nickname.

- |             |                  |
|-------------|------------------|
| 17. Ulexite | Rock Salt        |
| 18. Azurite | Peacock Ore      |
| 19. Galena  | Television Stone |
| 20. Pyrite  | Fool's Gold      |
| 21. Halite  | Lead Glance      |
| 22. Bornite | Chessylite       |

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For questions 23-27, please refer to the image to the immediate left.

23. What is the name of the mineral?

\_\_\_\_\_

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24. What is it composed of?

\_\_\_\_\_

-

25. What is its hardness and specific gravity?

\_\_\_\_\_

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26. What is its crystal system? \_\_\_\_\_

27. When exposed to ultraviolet light, this mineral "glows" or fluoresces. What causes this phenomenon?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



For questions 28-32, please refer to the image to the immediate left.

28. What is the name of the mineral?

\_\_\_\_\_

29. What is this mineral mainly composed of?

\_\_\_\_\_

30. What color does its streak have?

\_\_\_\_\_

31. What would happen if it were placed in hydrofluoric acid? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

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32. This mineral is piezoelectric, what does that mean? \_\_\_\_\_

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For questions 33-35, please refer to the image to the immediate left.

33. What is the name of this mineral?

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34. In its pure form, what color is the streak?

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35. When sawed or struck with a hard substance, what color are the flashes? \_\_\_\_\_



For questions 36-37, please refer to the image to the immediate left.

36. What is the name of the rock?

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37. What is the parent rock?

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38. Amethyst derives from the Greek word "amethystos". What was this mineral mainly used for during ancient Greece?

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39. Occasionally, andesites contain large, visible grains of plagioclase, amphibole, or pyroxene. These large crystals are known as "phenocrysts." How are they formed? \_\_\_\_\_

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40. Describe the difference between pumice and scoria as a result of their composition.

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41. Aragonite and calcite both have the same chemical formula,  $\text{CaCO}_3$ , how do they differ?

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42. What gives bornite it's colorful appearance? \_\_\_\_\_

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43. What is the difference between basalt and gabbro? \_\_\_\_\_

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For questions 44-50, please identify the rock/mineral with the description given.

44. This sedimentary rock was once used to be made into cutting tools and weapons.

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45. This mineral dissolves in warm water and gives off a strong rotten-egg odor when heated.

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46. The crystals are usually in rectangular form with a hexagonally-shaped cross section and crystals often have a triangular formation on the termination. \_\_\_\_\_

47. This rock is a foliated metamorphic rock with "salt and pepper" banding and lenses of varying composition, while other bands contain granular minerals with an interlocking texture. Other bands contain platy or elongated minerals with evidence of preferred orientation. It is the metamorphic form of granite.

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48. This is an intrusive, igneous rock and it is the most abundant rock in the deep oceanic crust.

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49. This type of igneous rock underlies more of Earth's surface than any other rock type. It is also an abundant rock on the moon.

\_\_\_\_\_  
50. This mineral is the most common mineral containing strontium, and is its primary ore. It is also isomorphous with Barite. \_\_\_\_\_