

You don't need to memorize information about rocks and minerals, if you have the Reference Tables, and if you know how to read and use this document.

### I. The Rock Cycle (Page 6)

1. What name is applied to weathered particles of rock that accumulate at the surface of the Earth? \_\_\_\_\_
2. What *three* processes make sediments?  
\_\_\_\_\_
3. Igneous rock *cannot* change directly into \_\_\_\_\_  
without becoming another rock material first.
4. What kind of rock can change to another form of the same rock group without going through any other rock material shown in the boxes?  
(Which box can change directly back to itself?)  
\_\_\_\_\_
5. Igneous rock can be changed directly into three other materials as shown in this diagram.  
Weathering, erosion and deposition make... \_\_\_\_\_  
Heating and melting makes... \_\_\_\_\_  
Burial with heat and pressure makes... \_\_\_\_\_
6. Why are these processes called a cycle?  
\_\_\_\_\_

### II. Particle Sizes (Page 6)

7. How does silt differ from clay?  
\_\_\_\_\_

8. What is the largest size (diameter) of particles that can be classified as grains of sand? \_\_\_\_\_

### III. Igneous Rocks (Page 6)

9. What other rock type has the same composition as gabbro? \_\_\_\_\_
10. How large are the crystals in granite? \_\_\_\_\_
11. What five minerals are commonly found in basalt?  
\_\_\_\_\_
12. If diorite were made of much smaller crystals, it would be classified as \_\_\_\_\_.
13. How do extrusive rocks differ from intrusive rocks?  
\_\_\_\_\_
14. What is the color of rhyolite? \_\_\_\_\_
15. What is the approximate percentage of plagioclase in diorite? \_\_\_\_\_
16. Name one coarse grained, felsic rock. \_\_\_\_\_

Continue on to page 2.


17. What word is used to describe the grain size in pumice? \_\_\_\_\_

18. What two common igneous minerals are *not* found in basalt?  
\_\_\_\_\_

19. What igneous rock contains exceptionally large crystals? \_\_\_\_\_  
(See the note at the bottom of the chart.)

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#### IV. Sedimentary Rocks and Sediment (Page 7)

20. What sedimentary rock is represented by this symbol?  \_\_\_\_\_

21. What sedimentary rock is composed of clay? \_\_\_\_\_

22. How does breccia differ from conglomerate?  
\_\_\_\_\_

23. In what *two* ways is limestone made?  
\_\_\_\_\_  
\_\_\_\_\_

24. What clastic rock contains particles with the greatest range of sizes? \_\_\_\_\_

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#### V. Metamorphic Rocks (Page 7)

25. What mineral family is found in schist, gneiss and slate? \_\_\_\_\_

26. Which *two* metamorphic rocks are composed of the largest crystals?  
\_\_\_\_\_

27. Which metamorphic rock is monomineralic? \_\_\_\_\_  
(That is, it generally contains only one mineral)

28. What rock is slate made from? \_\_\_\_\_

29. Marble is made from \_\_\_\_\_

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#### VI. Chemical Composition of Rocks (Page 11)

(The crust is the bedrock portion of the Earth near the surface. The composition of rocks deep in the Earth is not the same as rocks within the crust.)

30. By mass, the two most common elements in the Earth's crust are...  
\_\_\_\_\_

31. What group of minerals is rich in these two elements? \_\_\_\_\_  
(This answer is not found directly in the Tables.)

32. What element is common in rocks, in air, and in water? \_\_\_\_\_

33. Why is silicon the second most abundant element by mass, but back in fifth place by volume?  
\_\_\_\_\_  
\_\_\_\_\_

34. What are the chemical symbols for...

Silicon \_\_\_\_\_ Oxygen \_\_\_\_\_

Iron \_\_\_\_\_ Potassium \_\_\_\_\_

*The End*