Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class Hour: \_\_\_\_\_\_\_\_

**Review Guide: Rocks, Minerals and Forces that Change the Earth**

**Mineral Properties:**Define the following vocabulary words.

1. Streak
2. Luster
3. Crystal system
4. Hardness
5. Cleavage
6. Fracture
7. Color
8. Density
9. What are the 5 characteristics of a mineral?

a.

b.

c.

d.

e.

10. What is the hardest known mineral?

11. What is the softest known mineral?

**Mineral Formation:**

12. What are the two ways minerals are formed?

**Classifying Rocks and Rock Groups**

13. Understand the 5 stages of the rock cycle diagram.
14. What three characteristics do geologists use to identify rocks?

Define the following vocabulary words.

15. Igneous rock

16. Metamorphic rock

17. Sedimentary rock

18. Rock cycle

19. Extrusive

20. Intrusive

21. Erosion

22. Deposition

23. Compaction

24. Cementation

25. Foliated

26. Nonfoliated

27. What is needed for deposition to end and process compaction to begin? (Hint: Sedimentary Rock Formation Diagram)

28. Which would have smaller crystals – an igneous rock formed from magma that cooled deep below the surface or an igneous rock that cooled from lava on the surface? ***EXPLAIN WHY***?

**Weathering and Erosion:**

29. Understand the weathering diagram.

Define the following vocabulary words.

30. Weathering

31. Erosion

32. Physical weathering

33. Chemical weathering

Write a “C” if statement is describing chemical weathering or “M” if mechanical weathering

30. \_\_\_\_\_ roots grow into cracks of rocks and pry them apart.

31. \_\_\_\_\_ breaks rocks by ice freezing and thawing.

32. \_\_\_\_\_ rock particles wear away rock.

33. \_\_\_\_\_ oxidation produces rust on some rocks with iron.

34. \_\_\_\_\_ carbon dioxide in water then weathers marble and limestone.

35. \_\_\_\_\_ ground breaks away by animals burrowing.

36. \_\_\_\_\_ fossil fuels react with water in air to create precipitation that wears minerals away.

37. \_\_\_\_\_ plants produce weak acid that slowly dissolve rock that surrounds roots.

Sample Test Questions:

38. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a rounded, hollow rock that is often lined with mineral crystals.

39. What process causes crystallization of minerals from magma?

 a. cooling

 b. melting

 c. evaporation

 d. high pressure

40. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is molten rock material that exists below Earth’s surface.

41. Igneous rock that formed from lava that erupted on Earth’s surface is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

42. Compare the difference between metamorphic rocks that are foliated versus nonfoliated.

43. Particles of minerals called \_\_\_\_\_\_\_\_\_\_ give rock its texture.

44. Geologists determine whether an igneous rock is extrusive or intrusive based on its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

45. Explain what affects the size of crystals formed from magma?

46. Which is NOT a property of grain texture used when determining mineral composition?

 a. size

 b. shape

 c. density

 d. pattern

47. Chemical reactions, pressure and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ can cause sedimentary rock to change to metamorphic rock.

48. Because minerals do NOT come from living things they are said to be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

49. Determine what was tested if a mineral’s powder was found to be purple.

50. The grinding away of rock by other rock particles carried by wind and water is \_\_\_\_\_\_\_\_\_\_.

 a. drought

 b. abrasion

 c. oxidation

 d. acidification