

Name: \_\_\_\_\_ #: \_\_\_\_\_



## Rocks & Minerals Study Guide

**I. Directions: Please use the word bank to fill in the blanks below.**

Rock	magma	circumference	Sedimentary
Mineral	lava	luster	Igneous
Calcite	mass	rock cycle	Metamorphic
Quartz	Gypsum	sediment	erosion

- 1.) A \_\_\_\_\_ is made up of minerals.
  
- 2.) A \_\_\_\_\_ rock is usually found in rivers and stream beds. It has lots of layers or sediment that have collected or compressed over a long period of time.
  
- 3.) \_\_\_\_\_ is what geologists call the "white mineral." It is VERY HARD! A Scratch Test would show that this mineral can not be scratched.
  
- 4.) The \_\_\_\_\_ is the process where new rocks are formed, and rocks are changed. It happens over millions of years.
  
- 5.) A rock is made up of many different \_\_\_\_\_.
  
- 6.) \_\_\_\_\_ is a mineral that is VERY SOFT!!! It is so soft that powder flakes off of it when put through a Scratch Test.
  
- 7.) \_\_\_\_\_ rocks are made when hot magma erupts out of a volcano. The lava, once magma, cools and hardens.
  
- 8.) The process where pieces of rock are moved by wind, gravity, water or ice is called \_\_\_\_\_.
  
- 9.) \_\_\_\_\_ is a mineral that reacts with acids, vinegar. This mineral bubbles when placed in vinegar.
  
- 10.) Rocks that were once sedimentary or igneous but change from pressure or heat are called \_\_\_\_\_ rocks.

- 11.) \_\_\_\_\_ is fossils, shells, sand, mud, twigs, leaves, broken bones and other stuff that is compressed together to form a special kind of rock.
- 12.) \_\_\_\_\_ is hot, molten liquid moving inside the earth.
- 13.) When you measure the \_\_\_\_\_ of a rock you can use a scale or balance. It is another word meaning weight.
- 14.) \_\_\_\_\_ is magma that is found outside on the earth's surface.
- 15.) When you observe a rock and notice how shiny or sparkly it is you are making observations on the \_\_\_\_\_ of a rock.
- 16.) When measuring the \_\_\_\_\_ of a rock you are measuring the distance around the rock.

**II. Please write I for Igneous, S for Sedimentary, or M for Metamorphic to answer the following questions about rocks.**

- 17.) These rocks form quickly on the earth's surface. \_\_\_\_\_
- 18.) These rocks form when sediments collect and compress. \_\_\_\_\_
- 19.) These rocks form in rivers or streams. \_\_\_\_\_
- 20.) These rocks form from pressure or heat. \_\_\_\_\_
- 21.) These rocks form when lava cools. \_\_\_\_\_
- 22.) These rocks form very, very slowly on the earth's surface. \_\_\_\_\_
- 23.) These rocks were once liquid, inside the earth's surface. \_\_\_\_\_
- 24.) These rocks are found near volcanoes. \_\_\_\_\_
- 25.) These rocks form when an existing rock transforms or changes. \_\_\_\_\_
- 26.) These rocks have layers or pieces of sediment. \_\_\_\_\_
- 27.) These rocks have ribbons or wavy patterns. \_\_\_\_\_
- 28.) These rocks have bubbles, holes or pock marks. \_\_\_\_\_
- 29.) These rocks can be shiny, glossy and smooth. \_\_\_\_\_
- 30.) These rocks can form in mountains. \_\_\_\_\_

**III. Please match the correct phase of the rock cycle with its explanation below.**

31.)

- Weathering                      When rocks erupt or exit the earth and form igneous rocks
- Erosion                         When rocks change due of pressure or heat into metamorphic rocks
- Deposition                     When molten or extremely hot rock particles liquefy into magma
- Compacting/  
Cementation                    When rocks particles are moved by wind, water, ice or gravity
- Metamorphosis                When rock particles come together, compress and stick
- Melting                         When rocks break apart from rain, or temperature
- Extrusion                        When rocks are dumped or put in place

**IV. Please use the chart below to answer the questions.**

	<b>Paper Clip</b>	<b>Knife</b>
<b>Mineral A</b>	<b>Yes</b>	<b>Yes</b>
<b>Mineral B</b>	<b>No</b>	<b>No</b>
<b>Mineral C</b>	<b>No</b>	<b>No</b>

32.) Which is the hardest mineral? \_\_\_\_\_ How can you tell?

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33.) Which is the softest mineral? \_\_\_\_\_ How can you tell?

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**V. Please answer the questions.**

34.) What is the difference between a rock and a mineral?

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35.) What type of rock Sedimentary or Metamorphic would be used to build a building?  
Why?

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36.) According to the Rock Cycle, what must happen to an Igneous Rock in order for it to become a Metamorphic Rock?

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37.) A girl found something in her back yard. It was all different colors. It looked like there were fossils or bones in it. When she placed it in vinegar it bubbled a bit. Did she find a rock or a mineral? How can you tell?

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In the space below please draw what a Sedimentary Rock and an Igneous rock might look like and why.

Igneous Rock	<hr/> <hr/> <hr/>
Sedimentary Rock	<hr/> <hr/> <hr/>