**Study Guide: Rocks and the Rock Cycle** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* What is the definition of a rock?\_\_\_\_a mixture of rock particles, minerals, and sometimes organic matter\_\_\_\_\_\_\_\_
* What are the three types of rock? How do they form?
  1. \_\_igneous\_\_\_\_\_\_\_\_\_: \_\_\_\_\_melting and cooling\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  2. \_\_sedimentary\_\_\_\_\_: \_\_\_\_\_sediment that is compacted together\_\_\_\_\_\_\_\_\_\_\_
  3. \_\_metamorphic\_\_\_\_: \_\_\_\_\_heat and pressure\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* What are the steps/processes to make a clastic sedimentary rock? Define each step.
  1. \_\_weathering\_\_\_\_\_\_: \_\_\_breaking of rock into pieces\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  2. \_\_erosion\_\_\_\_\_\_\_\_\_: \_\_\_movement of sediment\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  3. \_\_deposition\_\_\_\_\_\_: \_\_\_\_settling of sediment into layers\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  4. \_\_compaction\_\_\_\_\_: \_\_\_\_pressing of sediment together to form rock\_\_\_\_\_\_\_\_\_\_\_\_\_
  5. \_\_cementation\_\_\_\_: \_\_\_\_natural gluing of sediment\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* What are the two classifications of metamorphic rock? Describe each in a few words.
  1. \_\_foliated\_\_\_\_\_\_: \_\_\_\_\_mineral grains are arranged in parallel layers\_\_\_\_\_\_\_\_\_
  2. \_\_nonfoliated\_\_\_: \_\_\_\_\_ mineral grains are NOT arranged in parallel layers \_\_\_\_
* What are the two classifications of igneous rock? Describe each in a few words.
  1. \_intrusive\_\_\_\_\_\_\_\_\_: \_\_formed from slowly cooling magma below Earth’s surface\_\_
  2. \_extrusive\_\_\_\_\_\_\_\_\_: \_\_formed from quickly cooling lava on Earth’s surface\_\_\_\_\_\_\_
* What are the other two classifications of sedimentary rock (clastic already has been described in question 3)? Describe each in a few words.
  1. \_chemical\_\_\_\_\_\_\_\_\_\_\_: \_\_formed from solutions that evaporated\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  2. \_\_organic\_\_\_\_\_\_\_\_\_\_\_: \_\_\_ made from the remains of once living things\_\_\_\_\_\_\_\_\_\_\_
* What makes an igneous rock have large crystals vs. no crystals or vesicles (air bubbles)?

\_\_\_\_intrusive igneous rocks cool slowly allowing crystals a long to form, however extrusive igneous rocks cool quickly not allowing crystals time to form or air bubbles may get trapped.\_\_\_

* What is the rock cycle?\_\_\_process by which rocks change into other rocks\_\_\_\_\_\_\_\_\_\_\_

**SEE THE BACK TO COMPLETE THE DIAGRAM**

* **Fill in the chart below.**

**Word Bank:**

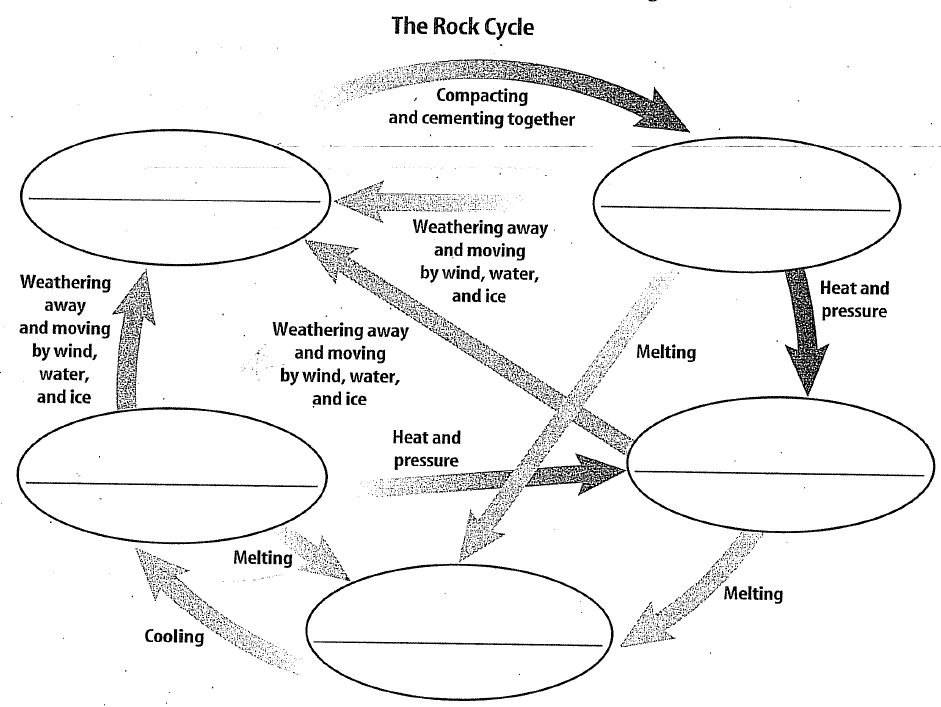
Sedimentary rock

Sediment

Igneous Rock

Metamorphic Rock

Magma or Lava (molten rock)



**Metamorphic Rock**

**Magma/lava**

**Igneous Rock**

**Sediment**

**Sedimentary**

* **ALSO LOOK OVER:**
  1. **ROCKS FLIPCHART**
  2. **ROCKS PAMPHLET (PINK)**
  3. **ROCK CYCLE DIAGRAM**