Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_\_\_ Pts\_\_\_\_\_\_\_\_\_\_\_

The Rock Cycle

Follow the web quest carefully. You will take 3 quizzes towards the end on the material you read. Receive a stamp for each quiz for full credit.

<http://www.learner.org/interactives/rockcycle/index.html>

**Types of Rocks**

1. The three main types or classes of rocks are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Fill in the table for each class of rock:

|  |  |  |
| --- | --- | --- |
| **Class** | **Characteristics (at least 3)** | **Examples (at least 2)** |
| **Sedimentary** |  |  |
| **Metamorphic** |  |  |
| **Igneous** |  |  |

1. Characteristics like crystals, fossils, gas bubbles, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ help us identify rocks within the three main rock classes.
2. Start the “Rock Collection” tutorial and fill in the table for each type of rock:

|  |  |  |  |
| --- | --- | --- | --- |
| **Rock**  **CLASS: M/S/I** | **Characteristics** | **Quick sketch** | **Where can this rock be found?** |
| Gneiss  **CLASS**: |  |  |  |
| Marble  **CLASS**: |  |  |  |
| Conglomerate  **CLASS**: |  |  |  |
| Limestone  **CLASS**: |  |  |  |
| Basalt  **CLASS**: |  |  |  |
| Obsidian  **CLASS**: |  |  |  |

1. Rocks can change through \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and pressure.
   1. Explain how this happens using the words PULLED, TEMPERATURE, MELT, METAMORPHISM (underline these words in your explanation).
2. Rocks can change through melting and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
   1. Why does melting occur deep within the earth?
   2. How does rock get pulled into the earth where melting happens?
   3. How hot does it get?
   4. What substance can rock become?
3. Magma that is cooled is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ rock.
4. What is the difference between rock that cools quickly and rock that cools slowly?
5. Draw how rock is formed above and below the earth’s surface:

|  |  |
| --- | --- |
| Extrusive Igneous Rock (When magma is cooled above the earth’s surface) | Intrusive Igneous Rock (When magma is cooled below the earth’s surface) |
|  |  |

1. Besides wind, what other factors wear rocks down and break them apart?
2. Where are some places sediment can accumulate?
3. How does sediment become sedimentary rock? Use the words **particles, compacting, cementing** in your explanation.
4. Take the “TRANSFORM THE ROCK” quiz under HOW ROCKS CHANGE, show me your score and get a stamp here: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Take the “COMPLETE THE CYCLE” quiz under the ROCK CYCLE DIAGRAM, show me your score and get a stamp here: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Take the “TEST YOUR SKILLS” quiz, show me your score and get a stamp here: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_