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|  | Rock Cycle |
|  | 1. Read each paragraph
2. Highlight in YELLOW (or underline) the definition of the **BOLD** words
3. Highlight in PINK (or squiggle underline) the process of how the rock are formed
4. Highlight in GREEN (or double underline) the types of rocks and examples given.
5. Answer the questions
 |
| 1 | To us the Earth seems unimaginably huge and solid. We jump on it, dig in it, drop bombs on it, and rarely see any change. A boulder we see laying on the ground in the woods may have been lying in that same place for thousands of years. Only the occasional earthquake, volcanic eruption, or flood reminds us that the Earth is constantly changing. |
| 2 | Although the Earth seems solid to us, the part we live on is actually very thin. The surface of the Earth, the crust, is like the skin of a balloon. Inside the Earth is molten rock called **magma** that is in constant motion. The cool crust floats on this sea of liquid rock and we rare see what is happening inside. When pieces of the crust rub together we feel an earthquake. When the crust cracks open the magma explodes or oozes out as the lava of a volcano. As magma reaches the surface it cools and hardens into new, young rock. Scientist call the new rock that forms from molten rock **igneous** rock. Most of the Earth’s crust is made of igneous rock. Examples are granite, basalt, and obsidian. |
| 3 | It’s not just the inside of the Earth that affects rocks. Rain and water wash over and rub against the rocks. Over a very long time tiny particles that make up the rock are worn away. This is called **weathering**. The particles are washed away with the water, flowing downhill until they settle in the bottom of a pool or stream. After a heavy rain you can often see erosion and gravel and sand left along the roadsides. A pond or lake will often look muddy because there are so many tiny particles of rock and soil suspended in the water. Eventually all these particles will fall to the bottom and build up a layer of mud and sand. Year after year this layer gets thicker and thinker. These layers of mud and sand are called **sediments**. The particles on the bottom are squeezed together because of the weight of the mud and sand on top. Over thousands of years the sediments are squeezed together so tightly that they form new rocks. These are call **sedimentary** rocks because they are formed from the sediments in the bottom of a lake or ocean. Sometimes tiny animals are buried in the sediments. They also harden and turn into rock which we call **fossils**. Limestone, sandstone, and shale are examples of sedimentary rocks. |
| 4 | Older sedimentary or igneous rock is often pushed down deep into the crust of the Earth. The deeper it is pushed the more it heats up from the magma below and the pressure from the weight above. If the heat and pressure become high enough, the structure of the rock will change. The material in the rock will become harder and sometimes crystallizes into a **metamorphic** rock. Metamorphic rocks include marble, slate, and schist. |
| 5 | In time all rocks weather away and new rocks are created. This process of continuous change is called a cycle. The **rock cycle** is one of the Earth’s basic cycles where rocks go through a continuous change. We don’t notice it much because it happens so slowly. The rock you pick up off the ground may be a billion years old and it may take another billion years before it is recycled into some other kind of rock. |

Rock Cycle Worksheet

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| **Type of Rock** | **Detailed explanation of how it formed** | **Examples** |
| 1. Igneous
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| 1. Sedimentary
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| 1. Metamorphic
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| --- | --- |
| **Term** | **Definition** |
| 1. Magma
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| 1. Weathering
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| 1. Sediments
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| 1. Fossils
 |  |
| 1. Rock Cycle
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| 1. What are the 3 examples from paragraph 1 that remind us that the Earth is constantly changing?
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| 1. In complete sentences explain the following:

What is the main idea of this text? Give two examples from the text and explain how they support the main idea. |

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| 1. Create a diagram of the Rock Cycle using the space below. I have started this for you.

Each step must include the name of that part of the Rock Cycle and a picture.You must include arrows going from one part to the next part. Some terms will be on the arrowsUse following words (use them as many times as they appear on the list) |
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| ~~Magma~~ | Cooling | Melting |
| ~~Igneous Rock~~ | Heat & Pressure | Weathering & Erosion |
| Metamorphic Rock | Melting | Heat & Pressure |
| Weathering & Erosion |  Compaction & Cementation | Sediments |
| Sedimentary Rock | Weathering & Erosion  |  |

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| Create Diagram Here:MagmaIgneous Rock |