THE ROCK CYCLE
Activity Booklet
Name: ____________________
Igneous Rocks
(fire/melting and cooling)

Granite  ____ (black, gray, white or pink crystals)
Obsidian___ (no crystals, looks like glass)
Pumice____ (lightweight, has tiny holes, floats on water)
Sedimentary Rocks
(sediment pressed together)

Shale______ (dark gray, smooth, pressed clay sediment)
Limestone____ (light gray, pressed sediment)
Conglomerate___ (different types of sediment pressed together)
Sandstone _____ (rough, pressed sediment/sand)
Metamorphic Rocks

(heat & pressure)

Marble______ (white, shiny crystals)
Slate______ (dark gray to black with flat, thin layers)
Gneiss______ (speckled crystals that form layers)
Draw what you think the jar will look like after your teacher shakes it and all the sediment-sand, pebbles and peat settle. Label it.
<table>
<thead>
<tr>
<th>Type of Rock</th>
<th>What did we do? (Write or Draw)</th>
<th>What does it look like? (Draw)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sedimentary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Igneous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metamorphic</td>
<td></td>
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</tbody>
</table>
ROCK CYCLE CHALLENGE

(Fill in the numbers and colored ovals)

Processes: Heat & Pressure, Melt, Pressure, Weathering and Erosions, Cool/Crystallize, Compaction

Intermediate materials: Sediment, Magma
Use the rock cycle chart to answer the following questions.

1. What process(es) are needed for igneous rock to become sediment?

2. What process(es) are needed for sediment to become sedimentary rock?

3. What process(es) are needed for sedimentary rock to become metamorphic?

4. What process(es) are needed for metamorphic rock to become sedimentary?

5. What process(es) are needed for igneous rock to become sedimentary rock?

6. What process(es) are needed for sedimentary to become igneous rock?
**The Rock Chronicles**

**Directions:** Complete each row by drawing pictures and writing captions in the missing spaces.

| Hi! I am a small piece of rock called sediment. My other sediment friends and I always hang out together, but one day we noticed that things were changing... | ____________ | Next thing we knew, we were all part of one sedimentary rock (conglomerate)!

(What process happens here? How does a piece of sediment become a sedimentary rock?)

| Whew! Life as a metamorphic rock (gneiss) is pretty tough! As soon as I got comfortable with all this pressure, something amazing happened! | ____________ | ____________ | ____________ |

I was swept up into a volcano! It was so hot that I melted and turned into magma! Then, I cooled underground with pink, gray, and black crystals.

(What type of rock is the result of cooled and hardened magma?)
<table>
<thead>
<tr>
<th>As a frothy, igneous rock (pumice), my life began in a volcano where things were pretty hot! After I cooled off and hardened, I thought that the heat wave was over, but after years of...</th>
<th>Now look at me! I'm not even an igneous rock anymore! I'm metamorphic!</th>
</tr>
</thead>
<tbody>
<tr>
<td>(What process belongs here? How does an igneous rock become metamorphic?)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Here I was, a beautiful igneous rock (obsidian), minding my own business on the side of a mountain.</th>
<th>I've been here for a long time, so the rain and wind has really started wear me down. I don't feel like myself anymore. I think weathering has turned me into...</th>
</tr>
</thead>
<tbody>
<tr>
<td>(What happens after a rock is weathered by wind and water? What can it become?)</td>
<td></td>
</tr>
</tbody>
</table>