Ride the Rock Cycle

Go to http://sciencespot.net ➔ Kid Zone and click the link for Rocks & Minerals to find these sites to complete this worksheet.

Site #1: Study Jams- Watch the video to complete this section and then do the quiz.

1. Complete: Heat and pressure melts ______________________ rock and turns it into ______________.
   When it cools it becomes ________________ rock.
2. Igneous rock can be broken down by ________________ and the pieces moved around by erosion. The mix of pieces become ________________ rock, such as limestone.
3. The weight and pressure creates heat causing the ________________ rock to turn into ________________ rock, such as marble.
4. Try the quiz by clicking the Test Yourself button. How did you do? ____ out of 7

Site #2: Learner.org - Rock Cycle - Click "Begin with Types of Rock" to start.

1. Identify each type of rock.
   ________________ rocks are formed when magma cools and hardens. ________________ rocks are formed from particles of sand, shells, pebbles, & other fragments. that are often compacted or cemented together. ________________ rocks are formed under the surface of the earth from the metamorphosis that occurs due to intense heat and pressure.

2. Read the descriptions of each characteristic that can be used to identify and classify rocks and then click "Next: Start your rock collection". Follow the directions to collect samples.

3. Read the description of each rock to complete the first column in the chart with the key characteristic you might observe in each sample.

4. Click the link to "Identify Rock Types" and complete the activity. Fill in the second row of the chart as you do the activity using I for igneous, S for sedimentary, and M for metamorphic.

5. Answer the questions. What was your score? ____ out of 10

6. Click the link for "How Rocks Change" and read the information to complete each statement. Click "Next" to move through the chapter.

   A. The changing of rocks from one type to another is called the _______ _________. Rocks can be changed by ________ and ____________, such as an igneous rock being changed into a metamorphic rock.
   B. Rocks can be changed by ____________ and ____________, which creates magma or lava that cools and crystallizes.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Key Characteristic</th>
<th>Rock Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conglomerate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gneiss</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td></td>
<td></td>
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<tr>
<td>Basalt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obsidian</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marble</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
C. Rocks can be broken down by ______________ and ______________ into smaller pieces called sediment, which can be ____________ together by pressure or ____________ together by minerals.

7. Click the link to "Transform the Rock" and click "Begin". Answer the first set of questions and then click "Next" to continue.
   How did you do? _____ out of 18

8. Click the link to move to the next chapter. Read the information provided about the rock cycle and then click the link to "Complete the Cycle". Answer the questions.
   How did you do? _____ out of 10
Site #1: Study Jams- Watch the video to complete this section.

1. Complete: Heat and pressure melts **metamorphic** rock and turns it into **magma**. When it cools it becomes **igneous** rock.

2. Igneous rock can be broken down by **weathering** and the pieces moved around by erosion. The mix of pieces become **sedimentary** rock, such as limestone.

3. The weight and pressure creates heat causing the **sedimentary** rock to turn into **metamorphic** rock, such as marble.

4. Try the quiz by clicking the Test Yourself button. How did you do? ?? out of 7 correct

Site #2: Learner.org - Rock Cycle - Click "Begin with Types of Rocks" to start.

1. Identify each type of rock.
   - **IGNEOUS** rocks are formed when magma cools and hardens. **SEDIMENTARY** rocks are formed from particles of sand, shells, pebbles, & other fragments. that are often compacted or cemented together.
   - **METAMORPHIC** rocks are formed under the surface of the earth from the metamorphosis (change) that occurs due to intense heat and pressure (squeezing).

2. Read the descriptions of each characteristic that can help you identify and classify rocks and then click "Next: Start Your Rock Collection". Follow the directions to collect samples.

3. Read the description of each rock to complete the first column in the chart with the key characteristic you might observe in each one.

4. Click the link to "Identify Rock Types" and complete the activity. Fill in the second row of the chart as you do the activity using I for igneous, S for sedimentary, and M for metamorphic.

5. Answer the questions. What was your score? ____ out of 10
   (Answers will vary)

6. Click the link to move to the next chapter about "How Rocks Change" and read the information to complete each statement. Click "Next" to move through the chapter.

   A. The changing of rocks from one type to another is called the **ROCK CYCLE**. Rocks can be changed by **HEAT** and **PRESSURE**, such as an igneous rock being changed into a metamorphic rock.
   
   B. Rocks can be changed by **MELTING** and **COOLING**, which creates magma or lava that cools and crystallizes.
   
   C. Rocks can be broken down by **WEATHERING** and **EROSION** into smaller pieces called sediment, which can be **COMPACTED** together by pressure or **CEMENTED** together by minerals.

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7. Click the link to "Transform the Rock" and click "Begin". Answer the first set of questions and then click "Next" to continue.

   How did you do? _____ out of 18 (Answers will vary)

8. Click the link to move to the next chapter. Read the information provided about the rock cycle and then click the link to "Complete the Cycle". Answer the questions.

   How did you do? _____ out of 10 (Answers will vary)