

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Period: \_\_\_\_\_

## Rock Cycle WebQuest

### Directions

- Go to <http://feldmannscience.weebly.com> and click the link for the *Rock Cycle Webquest* on the home page.
- Notice that there are two websites for this webquest located on the left side of the *Rock Cycle Webquest* page.
- Part 1 is due at the end of class for a classwork grade. You may write your answers on this paper.
- If you finish early, explore deeper with rocks in Part 2.

### Part 1

- Access Website #1: Interactives Rock Cycle by clicking on the blue link on the left hand side of the page.
- Click on the link that says Types of Rocks - found along the green band running across the website.

1. Read the information found on the webpage to fill in the following blanks about the three types of rocks:

#### Sedimentary – Formed by compacting and cementation (lithification)

Sedimentary rocks are formed from particles of \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and other fragments of material.

Sedimentary is usually the only type that contains \_\_\_\_\_.

#### Metamorphic – Formed by heat and pressure

The rocks that result from these processes often have \_\_\_\_\_ layers and may have shiny \_\_\_\_\_, formed by minerals growing slowly over time, on their surface.

#### Igneous – Formed by cooling lava/magma

When lava cools very \_\_\_\_\_, no crystals form and the rock looks shiny and \_\_\_\_\_. Sometimes gas \_\_\_\_\_ are trapped in the rock during the cooling process, leaving tiny holes and spaces in the rock.

2. At the bottom of the screen click on the red link, Next: Start your rock collection.

- Follow the directions to determine whether each rock below is *sedimentary, metamorphic or igneous*
- Write the rock type in the space provided

Rock Name	Rock Type
Conglomerate	
Limestone	
Basalt	

Rock Name	Rock Type
Gneiss	
Obsidian	
Marble	

3. At the bottom of the screen click on the red link, Identify Rock Types

- Complete the challenge
- When finished, show Mrs. Feldmann your score on the computer screen **and** record the number here: \_\_\_\_\_

4. Click on Move on to the next chapter (How Rocks Change).

- Click on the green Start to watch the “Heat and Pressure” animation.
- What type of rock was formed in this animation? \_\_\_\_\_

5. Click on the red link Next at the bottom of the screen.

- Read about “How Rocks Change” and fill in the following information:

It takes temperatures between \_\_\_\_\_ and \_\_\_\_\_ degrees Celsius (1,100 and 2,400 degrees Fahrenheit) to melt a rock, turning it into a substance called magma (molten rock).

- Watch the animations on melting and cooling. Describe your favorite animation in the box below:

**6. Click on the red link Next at the bottom of the screen.**

- Watch the animation on “Weathering & Erosion” and fill in the blanks:

Rocks are \_\_\_\_\_ and washed away by \_\_\_\_\_ and \_\_\_\_\_.

- Watch the animation on “Compacting & Cementing” and fill in the blanks:

Accumulated \_\_\_\_\_ is \_\_\_\_\_ together to form \_\_\_\_\_ rock.

**7. Click on the red link Transform the Rock.**

- Complete the challenge
- When finished, show Mrs. Feldmann your score on the computer screen **and** record the number here: \_\_\_\_\_

**8. Click on Move on to the next chapter (The Rock Cycle Diagram).**

- Roll your mouse over the diagram to gain more information about each part
- Answer the following question

All rock types change into sediments through the process of \_\_\_\_\_

Sedimentary and igneous rock turn into metamorphic rock through the process of \_\_\_\_\_

Metamorphic rock and igneous rock turn into magma through the process of \_\_\_\_\_

**9. Click on the red link Complete the Cycle.**

- Complete the challenge
- When finished, show Mrs. Feldmann your score on the computer screen **and** record the number here: \_\_\_\_\_

**Finished early? Explore deeper into the rocks with Part 2 until the end of the class period.  
Don't forget to turn in this assignment at the end of class for a classwork grade!**

**Part 2**

- Access Website #2: Rock Lab by clicking on the blue link on the left hand side of the page.
- Identify the different rocks in the box by clicking and dragging the rock onto the scale.
- Click and drag the magnifying glass onto the rock to view the rock's appearance. Choose the correct testing room by clicking on the door. The door will only open if you have chosen the right room.
- Click on the posters in the room to help identify the properties of the rock.
- Match the properties to a rock using the Table/Graph tool located in the bottom left corner.
- Return to the Main Lab. Click on the small white arrow under the scale to access the list of rocks and check your results with the check button (if you have audio) or with Mrs. Feldmann. Record your answers below!


