

Name _____

How Do Rocks Undergo Change?

Go to: http://www.classzone.com/books/earth_science/terc/navigation/investigation.cfm, or Mr. W's enote page and look for the classzone link (easier!!)

Scroll down to chapter 6 and click on 'How Do Rocks Undergo Change?'

Step 1: Igneous, Sedimentary, and Metamorphic Rocks

1. Where are igneous rocks created in Hawaii, how do they become sedimentary?

Step 2: Interactive Rock Cycle Animation

1. What occurs in each of these stages?

- a. Lava Flow (you should have seen this before)-

- b. Click on the rain cloud for evidence of erosion. Describe and identify the location of the following features:

-Glaciated Valley _____

-River Valley _____

-Arches _____

-Sea Cliffs _____

-Desert Monuments _____

-Sand Dunes _____

-Underground Cavern _____

- c. Transportation of Sediments- observe the animation of steam flow

- d. Deposition of Sediments, observe the animation

-What does the stream flow do as it enters deep water? _____

-What types of sediments accumulate near the shore, why? _____

-What size grains settle out next? _____

-What is the last size grain to settle out of moving water? _____

- e. Compaction and Cementation of Sediments, observe the animation

-How do sand grains get cemented together? _____

-What are the two ingredients that make up sandstone? _____,

- f. Metamorphism, observe the animation

-What are the three minerals found in diorite? _____,

_____, _____

- How are these minerals arranged? _____
- What happens underground to this rock? _____
- What happens to the mineral grains as they are squeezed? _____
- _____
- What are aligned grains called? _____
- What is the igneous rock called, what mineral was replaced and what is the new mineral called? _____, _____
- g. Melting of metamorphic rock, observe animation
- What happens to the metamorphic rocks? _____

Step 3: Rock Cycle Diagram

1. What does a red arrow represent? _____
 What rock formed in step 2 above that best represents a red arrow? _____
2. What does a green arrow represent? _____
 What rock formed in step 2 above that best represents a green arrow? _____
3. What does a purple arrow represent? _____
 What rock formed in step 2 above that best represents a purple arrow? _____

Now go to http://www.classzone.com/books/earth_science/terc/navigation/visualization.cfm, scroll down Chapter 7 and click on 'Observing an animation of how coal forms.'

1. What is peat and how does it form?
2. What is lignite and how does it form?
3. What is bituminous coal, how does it form and what type of rock is it?
4. What is anthracite coal, how does it form and what type of rock is it?