**Student Handout 2**

**Rock Identification**

**Dichotomous Key**

1. What is the overall color of the rock?

a. Rock is black in color ...................................................Go to step 2

b. Rock is not black .........................................................Go to step 3

2. Is the rock glassy or not?

a. Rock is smooth and glassy ............................................Obsidian (Igneous)

b. Rock is not glassy .........................................................Go to step 4

3. Inspect the rock carefully **without** the hand lens. Are there large holes or pores?

a. Rock has visible holes or pores ......................................Go to step 5

b. Rock has small or unseen pores ....................................Go to step 6

4. Does the rock show layering or is it more blocky?

a. Rock is layered ............................................................Shale (Sedimentary)

b. Rock is not layered it is more blocky .............................Coal (Sedimentary)

5. What is the overall color of the rock?

a. Rock is grey or light grey ..............................................Pumice (Igneous)

b. Rock is reddish-brown or dark brown .............................Scoria (Igneous)

6. Look closely at the rock **with** a hand lens. Does the surface sparkle or have crystals?

a. Rock sparkles or appears crystalline ...............................Go to step 7

b. Rock is dull and doesn’t sparkle .....................................Go to step 8

7. Look carefully at the rock. Is the rock multicolored or not?

a. Rock color is multicolored or speckled ...........................Go to step 9

b. Rocks color is the same throughout ...............................Marble (Metamorphic)

8. Look closely at the rock **with** a hand lens. Are the grains large or small?

a. Rock grains are pebble size and/or mixed sizes ............ Conglomerate (Sedimentary). Rock grains are mostly sand size ......................................Sandstone (Sedimentary)

9. Does the rock show layering of grains?

a. Rock grains are in layers ..............................................Gneiss (Metamorphic)

b. Rock grains are scattered with crystals ..........................Granite (Igneous)