

Name _____
Partner _____
Block _____ Lab prd _____
Date _____

What Rock Is It?

A *dichotomous key* is a useful tool that scientists use to help identify object by using specific characteristics one at a time.

You will start at the top of the blue chart with each new rock. Look only at the characteristic the chart asks for and answer “yes” or “no” following the appropriate line of the chart for the chart until the rock is identified. When your whole group thinks they have identified each rock in the packet, have the teacher check out your choices.

SPECIAL SAFETY NOTE: We will be using HYDROCHLORIC ACID instead of vinegar to test some of the rocks. You will need *safety goggles* when the acid is used. You will need to be especially careful not to spill acid on your yourself, your partner or materials on your desk. If you do get acid on yourself, go immediately to a sink and run cool water over the spilled-on area. Also notify the teacher IMMEDIATELY that there has been an accident.

Identify the rocks using the dichotomous key.

1. Two of the rocks fizzed with the acid. Look carefully at the two rocks. Look up each rock up in your textbook. What do the two rocks have in common? How are they different? How are they classified? What is the relationship between these two rocks?

2. Find the two rocks that were noncrystalline, solid, unreactive to acid and layered. Look carefully at the two rocks. Look up each rock up in your textbook. What do the two rocks have in common? How are they different? How are they classified? What is the relationship between these two rocks?

3. Look carefully at granite, schist and gneiss. Classify each of them. If possible, identify any individual minerals contained in the rocks. Look at the rock cycle. How was each rock created? Do you think there is a relationship between these two rocks?

4. Pick up scoria and pumice. Looking carefully at each what do they have in common? How are they different? How are they classified? What kind of environmental conditions were they formed under?

5. Which rocks in the chart were difficult to identify? In terms of rock characteristics, why did you have difficulty?

6. If you were the teacher, what would you do to the physical specimens of this lab to make it easier ?