Names: _____ Block: _____ Date: _____

Erosion LAB

PRE-LAB

Background Information:

Observe these two mountain ranges (Rocky Mountains on the left and the Green Mountains on the right). The Appalachian range, of which the Green Mountains are a part, used to be taller than the rockies. Over a long period of time through a process called **erosion** the Green mountains wore down to the picturesque scene we see here in Vermont. In earth science, **erosion** is the action of surface processes (such as water flow or wind) that removes soil, rock, or dissolved material from one location on the Earth's crust, and then transports it to another location. **Erosion** is a strong connection between which of Earth's systems? Can the process of erosion be modeled in the classroom using sugar cubes shaken in a small film canister?

Testable Question:

How does the number of shakes affect the mass of the sugar cubes in the canister?

Label the IV and DV near the correct part of the question above

Hypothesis (if/then):
If the canister is shaken _____(more or less), then the mass of the sugar cube will be_____(greater or less) because _____.

Constant Variables:

-
-
-
-

PROCEDURE
Materials:
- Three sugar cubes
- Film canister
- Digital scale
- Timer

Steps: (check of items as you go)

1. ____Place the sugar cubes on the scale and record the beginning mass including units

2. ____Place the sugar cubes in the canister.

3. ____Shake the canister constantly for 5 min.

4. ____Carefully remove the cubes and use the scale to get the mass. Record mass.

5. ____ place cubes back in the canister

6. ____Repeat 3-4 collecting data for 5, 10 and 15 min.

Create this data table

	Beginning mass	After 5 min	After 10 min	After
Group 1				
Group 2				
Group 3				
Group 4				
Group 5				
Group 6				

Graph:

Title: _____

_____

Name   Date

	Missing or incorrect	Minor misconceptions	Complete and correct
Claim: Answers the testable question - 3 points			
Evidence: Uses specific data to support claim - 5 points			
Reasoning: Connects the evidence to the claim using scientific concepts does not restate the evidence, rather			

explains **how/ why** this happens, uses vocabulary **-** 7 points			

How does the time that the sugar cube was shaken affect the
the sugar cube?

Claim:

Evidence:

Reasoning: