

## Surface Area Physical Weathering Lab



**Materials:** You will need three Alka-Seltzers, access to a scale in milligrams, a stop watch.

**Directions:** At your table groups, write down a hypothesis for the following question. Design an experiment to test your hypothesis and fill out lab sheet. The Alka-Seltzer will be representing rock.

**Will rock weather faster or slower if it has a greater surface area exposed?**

Hypothesis:
Step by Step Procedure: (Circle the control, Underline the variables)
Observations:
Conclusion:

1. What is the relationship between surface area and weathering rate?
2. Describe how physical and chemical weathering were involved in this lab.

## Teacher Insights, Reflection, and Procedures

- This is a straightforward lab that should demonstrate to students how surface area exposes more of the rock to the elements of weather and therefore can weather quicker.
- Students will already know what physical weathering is and a little bit of understanding as to what chemical weathering is.
- When the lab is complete we discuss their findings and their experimental design.