

Chemical Weathering

Subject Area	Earth's Changing Surface
Age or Grade	8 th
Estimated Length	50 minutes (1 one period)
Prerequisite knowledge/skills	Students should understand the effects of chemical and mechanical weathering. They should understand the differences between the two forms of weathering and the various agents involved in both forms of weathering.
Goals	Students will be complete a laboratory experiment in which they must follow the scientific method and the correct format for a laboratory report.
Materials Needed	<p>Rock samples (sandstone, limestone, granite, quartz), diluted acid, undiluted acid (for Teacher's use only), safety gloves, safety goggles, pipettes, chemical weathering handouts (see references)</p> <p>Set up 4 stations, each with rock sample, a small beaker of diluted acid, pipettes, and paper towels.</p>
Procedure	<p>Opener- Students should independently answer the following questions: 1) What is a chemical reaction? 2) List some signs of a chemical reaction. 3) What is a chemical reaction? 4) What are some agents that cause chemical weathering? Discuss answers as a class. Also review proper laboratory safety before beginning of the experiment.</p> <p>Development- Students should begin the laboratory write-up with the Introduction and the Experimental Procedures, following the directions on the Chemical Weathering worksheets. Next, divide students into groups and distribute safety materials. Students should follow experimental procedures outlined on the Chemical Weathering worksheets.</p> <p>Closure- Students should complete the conclusion</p>

	section of the laboratory report.
Evaluation	Students should write a paragraph outlining the evidence of weathering (both chemical and mechanical) in the world surrounding them.
References	See Chemical Weathering Worksheets on Homepage.