



Rock Cycle

Understanding the Earth's Crust



	K	1	2	3	4	5	6
Chemistry (1 week)	States of Matter	Characteristics of Solids	Elements	Mineral Composition	Compounds	New Compounds from Old	Movement of Molecules
Minerals (2 weeks)	Describing Minerals *(1 week)*	Minerals are Pure *(1 week)*	Mineral Growth	Molecules, Minerals, & Cleavage	Key Characteristics & Shapes	Properties & Uses of Minerals	Predicting Mineral Properties
Rocks (2 weeks)	Grouping Rocks	Characteristics of Rocks	Classifying Rocks *(1 week)*	Identifying Rocks & Sand	Three Types of Rocks	Environments that create Rocks	Analyzing the Rock Cycle
Past Life (1 week)	Discovering Dinosaurs *(2 weeks)*	Dinosaur Fossils *(2 weeks)*	Making & Observing Fossils *(2 weeks)*	Preservation of Fossils	Deriving Information from Fossils	Meaning of Fossils	Importance of Fossils

Rock Cycle at a Glance

The building blocks of minerals are elements and compounds. Minerals make up the three different types of rocks: igneous, sedimentary, and metamorphic. The Rock Cycle highlights methods by which the Earth recycles rock material through the mechanisms of Plate Tectonics. The primary rock type, igneous, is formed in two ways. Extrusive rocks (volcanic) implies that liquid (molten rock) usually reached the surface of the Earth through volcanic eruptions. Intrusive rocks (plutonic) refers to molten rock that does not reach the surface of the Earth, which cools deep within the earth. Agents of erosion such as wind, rain, ice, and gravity will break down rock that will be cemented later. These rocks are called sedimentary. Increase of pressure and temperature mainly within the lithosphere, cause metamorphic rocks to form. "Past Life" refers to the fossils that are preserved for us to interpret past environments.

In the Classroom

Chemistry comes alive as students are taught the elements by using the periodic table and how elements combine to form minerals. They compare and contrast different types of rocks and minerals. Students recreate how fossils are made and learn why the present is the key to the past.