

Unit/Topic	Learning Objectives	Essential Questions	Key Concepts	Activities	Assessments	Week	Technology	Notes	Grade Level	Course	Class
2. Understand Concepts and Processes of Evidence, Models, and Explanations	2.1 Use observations and data as evidence on which to base scientific explanations. (4-8 EDe)	How can we get the same results from an experiment in our classroom that students would see in nature?	Describe scientific methods.	Content - e.g. "Fossil" Cart from rock strata.	Activities, Assessments	Week 1	Technology	Notes	Grade 8	Science	Class
2. Understand Concepts and Processes of Evidence, Models, and Explanations	2.1 Use observations and data as evidence on which to base scientific explanations. (4-8 EDe)	How can we learn from conducting experiments: how do they work and why?	Distinguish among independent variables, dependent variables, constants, and controls.	Content - e.g. "Fossil" Cart from rock strata.	Activities, Assessments	Week 1	Technology	Notes	Grade 8	Science	Class
1.6 Understand Scientific Inquiry and Design: Critical Thinking Skills	1.6.7 Explain the difference among observations, hypotheses, and scientific theories.	What is the difference between a scientific law and a scientific theory?	Compare and contrast scientific theories and scientific laws.	Content - e.g. "Fossil" Cart from rock strata.	Activities, Assessments	Week 1	Technology	Notes	Grade 8	Science	Class
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1.1 Understand Systems, Order, and Organization	1.1.2 Apply the concepts of order and organization to a given system. (4-8 EDe)	How are minerals different from each other?	Apply the concepts of order and organization to a given system.	Content - e.g. "Fossil" Cart from rock strata.	Activities, Assessments	Week 1	Technology	Notes	Grade 8	Science	Class
1.1 Understand Systems, Order, and Organization	1.1.2 Use observations and data as evidence on which to base scientific explanations. (4-8 EDe)	How are minerals different from each other?	Categorize minerals using characteristics to identify them.	Content - e.g. "Fossil" Cart from rock strata.	Activities, Assessments	Week 1	Technology	Notes	Grade 8	Science	Class
1.1 Understand Systems, Order, and Organization	1.1.2 Use observations and data as evidence on which to base scientific explanations. (4-8 EDe)	How are rocks different from minerals?	Distinguish between a rock and a mineral.	Content - e.g. "Fossil" Cart from rock strata.	Activities, Assessments	Week 1	Technology	Notes	Grade 8	Science	Class
1.1 Understand Systems, Order, and Organization	1.1.2 Use observations and data as evidence on which to base scientific explanations. (4-8 EDe)	Why do some rocks look like they are made of several different materials?	Describe the rock cycle and demonstrate that a rock could be anything.	Content - e.g. "Fossil" Cart from rock strata.	Activities, Assessments	Week 1	Technology	Notes	Grade 8	Science	Class
1.1 Understand Systems, Order, and Organization	1.1.2 Use observations and data as evidence on which to base scientific explanations. (4-8 EDe)	What are the differences between intrusive and extrusive igneous rocks?	Contrast the formation of intrusive and extrusive igneous rocks.	Content - e.g. "Fossil" Cart from rock strata.	Activities, Assessments	Week 1	Technology	Notes	Grade 8	Science	Class
1.1 Understand Systems, Order, and Organization	1.1.2 Apply the concepts of order and organization to a given system. (4-8 EDe)	How are granite and basalt different from each other?	Contrast granitic and basaltic igneous rocks.	Content - e.g. "Fossil" Cart from rock strata.	Activities, Assessments	Week 1	Technology	Notes	Grade 8	Science	Class
1.1 Understand Systems, Order, and Organization	1.1.1 Explain the concept of scientific theory that suggests that the solar system formed from a nebular cloud of dust and gas. (HS-14)	Where do rocks come from in the life cycle?	Describe the conditions in Earth's crust that form igneous rocks.	Content - e.g. "Fossil" Cart from rock strata.	Activities, Assessments	Week 1	Technology	Notes	Grade 8	Science	Class
1.1 Understand Systems, Order, and Organization	1.1.2 Apply the concepts of order and organization to a given system. (4-8 EDe)	Why do some rocks look like the layers of a cake?	Identify how sedimentary rocks form from sediments.	Content - e.g. "Fossil" Cart from rock strata.	Activities, Assessments	Week 1	Technology	Notes	Grade 8	Science	Class
1.2 Understand Scientific Inquiry and Design: Critical Thinking Skills	1.2.1 Explain the terms: renewable energy source and nonrenewable energy source.	What energy sources are considered renewable?	Identify sources of renewable and nonrenewable energy resources.	Content - e.g. "Fossil" Cart from rock strata.	Activities, Assessments	Week 1	Technology	Notes	Grade 8	Science	Class
1.2 Understand Concepts and Processes of Evidence, Models, and Explanations	1.2 Develop scientific explanations based on knowledge, logic, and evidence. (4-8 EDe)	Why isn't just rely on fossil fuels energy?	Describe the advantages and disadvantages of various fossil fuels.	Content - e.g. "Fossil" Cart from rock strata.	Activities, Assessments	Week 1	Technology	Notes	Grade 8	Science	Class
1.2 Understand Concepts and Processes of Evidence, Models, and Explanations	1.2 Develop scientific explanations based on knowledge, logic, and evidence. (4-8 EDe)	Is nuclear energy the answer to our energy needs?	Explain the advantages and disadvantages of using nuclear energy.	Content - e.g. "Fossil" Cart from rock strata.	Activities, Assessments	Week 1	Technology	Notes	Grade 8	Science	Class