

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 Reasoning	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
3. Understand Concepts and Processes of Evidence, Models, and Reasoning	3.1 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
6. Understand Scientific Inquiry and Design: Critical Thinking Skills	6.1 Explain the difference among observations, hypotheses, and scientific theories. (4-8 EDe)	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
8. Understand Concepts and Processes of Evidence, Models, and Reasoning	8.1 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
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1. Understand Systems, Order, and Organization	1.1 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. Understand Systems, Order, and Organization	1.1 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. Understand Systems, Order, and Organization	1.1 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. Understand Systems, Order, and Organization	1.1 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 made of several different materials.	Content - e.g. "Fossil" Cart from rock strata.	Activities, Assessments	Week 1	Technology	Notes	Grade 8	Science	Class
1. Understand Systems, Order, and Organization	1.1 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. Understand Systems, Order, and Organization	1.1 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
4.1. Understand Scientific Theories of Origin and Subsequent Change in the Universe and Earth Systems	4.1.1 Explain the current scientific theory that suggests that the solar system formed from a nebular cloud of dust and gas. (5-8 EDe)	Where do rocks come from in the life cycle?	Describe the conditions in Earth's crust that cause metamorphic rocks to form.	Content - e.g. "Fossil" Cart from rock strata.	Activities, Assessments	Week 1	Technology	Notes	Grade 8	Science	Class
1. Understand Systems, Order, and Organization	1.1 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
4.2. Understand Scientific Theories of Origin and Subsequent Change in the Universe and Earth Systems	4.2.1 Explain the theory that suggests that the solar system formed from a nebular cloud of dust and gas. (5-8 EDe)	What energy sources are considered nonrenewable?	Identify sources of nonrenewable energy resources.	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 Reasoning	2.1 Develop scientific explanations based on knowledge, logic, and analysis. (4-8 EDe)	Why isn't just rely on fossil fuels to power our world?	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
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