

Unit	Learning Objectives	Essential Questions	Key Concepts	Practices	Assessments	Week	Topic	Notes	Grade Level	Course	Page
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 EDC)	How can we get the same results from an experiment in our classroom that students would see in nature?	Describe scientific methods	C.1 The Nature of Science	Notes, Vocab., Worksheets	August				Earth Science	
3. Understand Concepts and Processes of Evidence, Models, and Explanations	3.1 Use observations and data as evidence on which to base scientific explanations. (4-8 EDC)	How can we learn from conducting experiments: how do they work and why?	Distinguish among independent variables, dependent variables, constants, and controls	C.1 The Nature of Science		August				Earth Science	
6. Understand Scientific Inquiry and Design: Critical Thinking Skills	6.1 Explain the difference among observations, hypotheses, and scientific theories. (4-8 EDC)	What is the difference between a scientific law and a scientific theory?	Compare and contrast scientific theories and scientific laws	C.1 The Nature of Science		August				Earth Science	
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6. Understand Scientific Inquiry and Design: Critical Thinking Skills	6.1 Explain the difference among observations, hypotheses, and scientific theories. (4-8 EDC)	What is the difference between a scientific law and a scientific theory?	Compare and contrast scientific theories and scientific laws	C.1 The Nature of Science		August				Earth Science	
8. Understand Chemistry, Change, and Measurement	8.1 Measure and calculate using the metric system. (4-8 EDC)	What's the difference between a millimeter and a micrometer?	Write the prefixes used in SI and relate what multiple of one each one represents	C.1 The Nature of Science		August				Earth Science	
1. Understand Systems, Order, and Organization	1.2 Apply the concepts of order and organization to a given system. (4-8 EDC)	How are molecules classified?	Apply the concepts of order and organization to a given system	C.2 Molecules	Notes, Vocab., Worksheets	September				Earth Science	
1. Understand Systems, Order, and Organization	1.1 Use observations and data as evidence on which to base scientific explanations. (4-8 EDC)	How are minerals different from each other?	Categorize minerals using characteristics to identify them	C.2 Molecules	Mineral Vocab., Lab notes	September				Earth Science	
1. Understand Systems, Order, and Organization	1.1 Use observations and data as evidence on which to base scientific explanations. (4-8 EDC)	How are rocks different from minerals?	Distinguish between a rock and a mineral	C.4 Rocks	Notes, Vocab., Worksheets	October				Earth Science	
1. Understand Systems, Order, and Organization	1.2 Use observations and data as evidence on which to base scientific explanations. (4-8 EDC)	Why do some rocks look like they are made of several different materials?	Describe the rock cycle and metamorphic rocks that a rock could become	C.4 Rocks	Rock Vocab., Lab notes	October				Earth Science	
1. Understand Systems, Order, and Organization	1.2 Use observations and data as evidence on which to base scientific explanations. (4-8 EDC)	What are the differences between intrusive and extrusive igneous rocks?	Contrast the formation of intrusive and extrusive igneous rocks	C.4 Rocks		October				Earth Science	
1. Understand Systems, Order, and Organization	1.2 Apply the concepts of order and organization to a given system. (4-8 EDC)	How are granite and basalt different from each other?	Contrast granitic and basaltic igneous rocks	C.4 Rocks		October				Earth Science	
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. (HS-4.1.1)	Where do rocks come from in the hot planets?	Describe the conditions in Earth's inner solar system	C.4 Rocks		October				Earth Science	
1. Understand Systems, Order, and Organization	1.1 Apply the concepts of order and organization to a given system. (4-8 EDC)	Why do some rocks look like they are made of several different materials?	Describe the rock cycle and metamorphic rocks that a rock could become	C.4 Rocks		October				Earth Science	
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. (HS-4.2.1)	What energy sources are considered nonrenewable?	Identify sources of nonrenewable energy resources	C.5 Earth's Energy and Mineral Resources	Notes, Vocab., Worksheets	November				Earth Science	
2. Understand Concepts and Processes of Evidence, Models, and Explanations	2.2 Develop scientific explanations based on knowledge, logic, and analysis. (4-8 EDC)	Why isn't just rely on fossil fuels energy?	Describe the advantages and disadvantages of various fossil fuels	C.5 Earth's Energy and Mineral Resources		November				Earth Science	
2. Understand Concepts and Processes of Evidence, Models, and Explanations	2.2 Develop scientific explanations based on knowledge, logic, and analysis. (4-8 EDC)	What energy sources are considered nonrenewable?	Identify sources of nonrenewable energy resources	C.5 Earth's Energy and Mineral Resources	Notes, Vocab., Worksheets	November				Earth Science	