

Natural Science (Earth Science Section)

Month	Content	Skills	Assessment	Essential Questions
February	Unit 1: Topic 1 <u>Observations & Inferences</u> • Measurements • Change	<ul style="list-style-type: none"> • Describe & classify observations of the environment. • Make inferences based on observations. • Measure some of the properties of the environment. • Make measurements of SI units. • Graph data • Describe the nature of change. • Distinguish between cyclic & non-cyclic change. 	<ul style="list-style-type: none"> • lab: observation (dancing raisins) • inference – footprints from the past • quiz • labs mass, volume, density, % error • quiz • lab: sunspot analysis • quiz • question & answer • Unit 1 test: multiple choice & free 	
March/April	Unit 2: Topic III <u>Models of the Earth</u> • Latitude/Longitude Isolines • Earth Movements in Space • Conducting Academic Research	<ul style="list-style-type: none"> • Make use of Earth Science reference tables to gather information on the structure of the earth’s layers. • Determine a point on the earth’s surface. • Measure & describe the characteristic of this point. • Determine two effects of the earth’s rotation & revolution. • Calculate a planet’s eccentricity of orbit. • Use online journals to gather information. • Citation: parenthetical documentation 	<ul style="list-style-type: none"> • labs: - latitude/longitude <ul style="list-style-type: none"> - constructing a topographical map - reading a topographical map - constructing a profile of a topographical map • season cycle • ellipse lab 	

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Month	Content	Skills	Assessment	Essential Questions
May/June	Unit 2: Topic V <u>Energy in Earth Process</u> <u>Electromagnetic Energy</u> <u>(Standards 1,6)</u> <ul style="list-style-type: none"> • Transfer of Energy (Standards 1,6) • Transformation of Energy (Standards 1, 6) • Heat energy & changes in state (Standards 1, 6) 	<ul style="list-style-type: none"> • Describe the properties of electromagnetic energy. • Describe the interactions of electromagnetic energy. • Explain how energy is transferred. • Describe energy transformations that are observed in the environment. • Make inferences about the conservation of energy. • Explain how heat causes matter to change phase. • Explain what happens to energy as it changes. 	<ul style="list-style-type: none"> • lab: Electromagnetic Spectrum • quiz • lab: Conduction • lab: Convection • questions and answers • lab: Phase Change Lab • exam: multiple choice & short answer 	