

Curriculum Map

Grade 9

Content Earth Science

Teacher(s) Ethan Brown

	Time period (month? Weeks? Quarter?)	Focus Standard	Assessment	Essential Question	Resources	Differentiation
Unit 1	2 Weeks	Standard 1 Mathematical Analysis: Key Idea 1	Entry/Exit Slip Chapter/Unit Test Lab/Project	1. How do we make observations? 2. What is the difference between an inference and a prediction? 3. Why do we calculate density? 4. What can change density? 5. How do we graph density?	Suggested Labs: 1. Measurement 2. Graph 3. Extrapolation 4. Density of Solids 5. Density of Liquids ESRT- Earth Science Reference Tables p.1	<ul style="list-style-type: none"> Provide copy of notes Peer partner Extended time for written tasks/verbal response Break long tasks over multiple days Allow for multiple ways to respond (verbal, written, response board, scribe) Present complex tasks in
Prologue	Topics to be discussed are: scientific method, graphical relationships, measurement, density, observations, inferences, predictions	Abstract on and symbolic representation are used to communicate mathematically. Key Idea 2				<ul style="list-style-type: none"> Deductive and inductive reasoning are used

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		<p>to reach mathematical conclusions.</p> <p>Key Idea 3</p> <p>The central purpose of scientific inquiry is to develop explanations of natural phenomena in a continuing, creative process.</p>		6. How do you determine the rate of change?		<ul style="list-style-type: none"> multiple ways Model steps to read, interpret, and construct graphs Multiple opportunities to perform to repeat labs
<p>Unit 2 Mapping</p>	<p>3 Weeks</p> <p>The unit involves Earth's spheres, finding a location using a coordinate system (latitude and longitude), topographic mapping, field</p>	<p>Standard 1 Scientific Inquiry</p> <p>Key Idea 3</p> <ul style="list-style-type: none"> The observations made while testing proposed explanation 	<p>Entry/Exit Slip</p> <p>Chapter Unit Test</p> <p>Lab/Project</p>	<p>1. What is the earth system and how does it work</p>	<p>Suggested Labs:</p> <ul style="list-style-type: none"> Latitude and Longitude Field Maps Connecticut River Profile 	<ul style="list-style-type: none"> Provide copy of notes Peer partner Extended time for written tasks/verbal response Break long tasks

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	<p>mapping, and constructing profiles which incorporates contour intervals and gradient.</p>	<p>ons, when analyzed using conventional and invented methods, provide new insights into phenomena</p> <p>Standard 4 Key Idea 1 Performance Indicator 1.1c</p> <ul style="list-style-type: none"> • Earth's coordinate system of latitude and longitude, with the equator and prime meridian 		<p>? 2. What are the four spheres? 3. How do you determine latitude and longitude of a particular location on a map? 4. What are topographic maps and</p>	<ul style="list-style-type: none"> • Cortland • Quadrangle • McGraw • Quadrangle • Topographic Maps (Plastic Volcano) NYS Landscapes 	<p>over multiple days</p> <ul style="list-style-type: none"> • Allow for multiple ways to respond (verbal, written, response board, scribe) • Present complex tasks in multiple ways • Model steps to read, interpret, and construct graphs • Multiple opportunities to perform to repeat labs
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		<p>as reference lines, is based upon Earth's rotation and our observation of the Sun and stars.</p>		<p>what informa tion do they contain? 5. What is gradient? 6. What are contour intervals?</p>		
<p>Unit 3 Astronomy</p>	<p>6 Weeks Topics that should be covered are: the creation of the universe (Big Theory), its make-up and shape of</p>			<p>7. How do you construct a profile?</p>		

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	galaxies, Star luminosity, eccentricity, and make-up of the solar system. Topics that should be covered are: rotation, revolution, velocity, inertia, gravitation, moon phases, eclipses and tides.						

