

Semester 1 of 1					
Unit Number: Title and Duration	Purpose	Priority Grade-Level Standards	Content Goals	Learner Outcomes	Resources and Materials
Unit 1: Nature of Science 3 – 4 Weeks	To understand basic concepts of science	MS-ESS1-3 Analyze and interpret data to determine scale properties, scale, proportion, and quantity.	<p>Students will:</p> <ul style="list-style-type: none"> • Know what scientific inquiry is. • Know what and how scientific laws and scientific theories differ. • Know the difference between fact and opinion. • Know and use the international system of units. • Know what causes measurement uncertainty. • What are mean, median, mode, and range. • Understand how independent and dependent variables. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Interactive journaling • Tests/quizzes • Draw/Create models of scientific equipment. 	<p>McGraw Hill: <i>Integrated Science, Course 1</i></p> <ul style="list-style-type: none"> • Unit 1: Nature of Science <ul style="list-style-type: none"> ○ Lesson 1: Methods of Science <p>pp. NOS 1 – NOS 31</p>

Unit 2: Mapping Earth 2 – 3 Weeks	To understand how technology is used to measure Earth features and how it is modeled in different perspectives for different purposes	MS-ESS1-3 Analyze and interpret data to determine scale properties of objects in the solar system.	Students will: <ul style="list-style-type: none"> Understand how maps can help determine location. Describe why there are different map projections for representing Earth. Explain how topographic maps tell about the shape of Earth's surface. Explain how modern technology can be used in mapmaking. 	Students will be able to: <ul style="list-style-type: none"> Interactive journaling Tests/quizzes Draw/Create perspectives/maps 	McGraw Hill: <i>Integrated Science, Course 1</i> Unit 1: Exploring Earth <ul style="list-style-type: none"> Chapter 1: Mapping Earth <ul style="list-style-type: none"> Lesson 1: Maps Lesson 2: Earth's Structure pp. 6 - 37
Unit 3: Earth in space	To understand where Earth is in our solar system and within our universe, its movement, and how our solar system moves and relates to other objects within it.	MS-ESS1-1 Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons. MS-ESS1-2 Develop	Students will: <ul style="list-style-type: none"> Demonstrate what causes the season on Earth. Explain how the Moon affects Earth? Explain how solar and lunar eclipses 	Students will be able to: <ul style="list-style-type: none"> Interactive journaling Tests/quizzes Draw/Create a solar system. 	McGraw Hill: <i>Integrated Science, Course 1</i> Unit 1: Exploring Earth <ul style="list-style-type: none"> Chapter 2: Earth in Space <ul style="list-style-type: none"> Lesson 1: The Sun-Earth -

		and use a model to describe the role of gravity in the motions within galaxies and the solar system.	<p>differ?</p> <ul style="list-style-type: none"> Describe how gravity influences the shape and the motion of objects in the solar system. Describe/create the objects in the solar system. Describe what stars are. Compare Earth's Sun to other stars. Explain and demonstrate where Earth is located in the solar system and in the universe. -Explain how the universe is structured. 		<p>Moon System</p> <ul style="list-style-type: none"> Lesson 2: The Solar System Lesson 3: Stars, Galaxies, and the Universe <p>pp. 38 - 71</p>
<p>Unit 4: Our Planet – Earth</p> <p>2 – 3 Weeks</p>	To understand Earth's systems and how they interact	<p>MS-ESS2-1 Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.</p> <p>MS-ESS2.2 Construct</p>	<p>Students will:</p> <ul style="list-style-type: none"> Explain the composition and the structure of the atmosphere. Describe the 	<p>Students will be able to:</p> <ul style="list-style-type: none"> Interactive journaling Tests/quizzes 	<p>McGraw Hill: <i>Integrated Science, Course 1</i></p> <p>Unit 1: Exploring Earth</p> <p>Chapter 3: Our Planet – Earth</p>

		<p>an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.</p> <p>ESS2.3 Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions.</p> <p>MS-ESS2-4 Develop a model to describe the cycling of water through Earth's systems.</p>	<p>process of the water distribution and cycle in the hydrosphere.</p> <ul style="list-style-type: none"> List Earth's systems Describe the composition and the structure of the geosphere. Describe how the water cycle shows interactions of Earth's systems. Describe how weather shows interactions of Earth's systems. Describe how the rock cycle shows interactions of Earth's systems. 	<ul style="list-style-type: none"> Draw/Create <ul style="list-style-type: none"> Layers of the earth A water cycle. 	<p>Lesson 1: Earth's Systems</p> <p>Lesson 2: Interaction of Earth's Systems</p> <p>pp. 72 – 103</p>
<p>Unit 5: Earth's Dynamic Surface</p> <p>2 – 3 Weeks</p>	<p>To understand the processes that change Earth's surface</p>	<p>MS-ESS2-3 Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past</p>	<p>Students will:</p> <ul style="list-style-type: none"> Know the theory of plate tectonics. Know the differences between divergent, 	<p>Students will be able to:</p> <ul style="list-style-type: none"> Interactive journaling Tests/quizzes Draw/Create plate boundaries. 	<p>McGraw Hill: <i>Integrated Science, Course 1</i></p> <p>Unit 1: Exploring Earth</p> <ul style="list-style-type: none"> Chapter 4: Earth's Dynamic Surface <ul style="list-style-type: none"> Lesson 1:

		<p>plate motions.</p> <p>MS-ESS2-1 Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.</p> <p>MS-ESS2-4 Develop a model to describe the cycling of water through Earth's</p>	<p>convergent, and transform boundaries.</p> <ul style="list-style-type: none"> • Know the theory of what causes tectonic plates to move on Earth's surface. • Know where most earthquakes occur. • Know how landforms are related to plate tectonics. • Know where most volcanoes come from. • Know how plate movement forms mountains. • Know the difference between physical and chemical weathering. • Know how water, ice, and wind change Earth's surface. 		<p>Earth's Moving Surface</p> <ul style="list-style-type: none"> ○ Lesson 2: Shaping Earth's Surface ○ Lesson 3: Changing Earth's Surface <p>pp. 104 - 193</p>
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<p>Unit 6: Natural Resources</p> <p>2 – 3 Weeks</p>	<p>Understand why it is important to manage natural resources wisely</p>	<p>MS-ESS2-5 Collect data to provide evidence for how the motions and complex interactions of air masses result in changes in weather conditions.</p> <p>MS-ESS3-5 Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.</p> <p>MS-ESS3-2 Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.</p> <p>MS-ESS3-3 Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.</p>	<p>Students will:</p> <ul style="list-style-type: none"> • Know what the main sources of nonrenewable energy are. • Know the advantages and disadvantages of using renewable energy resources. • Know how individuals help manage nonrenewable resources wisely. • Know what the main sources of renewable energy are. • Know what the advantages and disadvantages of using renewable energy resources are. • Know what individuals can do to encourage the use of renewable energy resources. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Interactive journaling • Tests/quizzes • Draw/Create a weather journal. 	<p>McGraw Hill: <i>Integrated Science, Course 1</i></p> <p>Unit 1: Exploring Earth</p> <ul style="list-style-type: none"> • Chapter 5: Natural Resources <ul style="list-style-type: none"> ○ Lesson 1: Energy Resources ○ Lesson 2: Renewable Energy Resources ○ Lesson 3: Land Resources ○ Lesson 4: Air and Water Resources <p>pp. 140 - 181</p>
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End of Semester 1					