

3rd Grade Curriculum Map – Science (Revised 6-10-08)

Marking Period	Content What topic(s) is being covered and what is the important vocabulary?		Skills What do students have to be able to do?	Essential Questions What are fundamental, enduring questions that will guide study and instruction?	GLCEs What content expectations are met through this topic?	Instruction What activities are used to develop the skills and knowledge?	Resources What materials, texts, videos, internet, software, or human resources support instruction?	Assessment What evidence (products and/or performances) is collected to establish that the Content and Skills have been learned?
MP 1-2	<p>Discipline: Earth Science</p> <p>Standards: Earth Systems Solid Earth</p> <p>Statements: Weather Natural Resources Human Impact Earth Materials Surface Changes Using Earth Materials</p>	<p>Vocabulary: environment natural resources renewable nonrenewable recycle reuse reduce renewal dependant natural constructive minerals boulder gravel rock clay sand soil erosion glaciers volcanoes landslides earthquakes weathering fuels fossil fuels</p>	<ul style="list-style-type: none"> Identify natural resources Classify renewable and nonrenewable resources Describe ways humans are protecting, extending, and restoring resources Recognize that paper, metal, glass, and some plastics can be recycled Describe ways humans are dependent on the natural environment and constructed environments Describe helpful or harmful effects of humans on the environment Recognize and describe different types of earth materials Recognize that rocks are made up of minerals Identify and describe natural causes of change in the Earth's surface Identify Earth materials used to construct some common objects Describe how materials taken from the Earth can be used as fuels for heating and transportation Make purposeful of the natural world using the appropriate senses 	<ul style="list-style-type: none"> 	<p>E.ES.03.41 E.ES.03.42 E.ES.03.43 E.ES.03.44 E.ES.03.51 E.ES.03.52</p> <p>E.SE.03.13 E.SE.03.14 E.SE.03.22 E.SE.03.31 E.SE.03.32</p> <p>S.IP.03.11 S.IP.03.12 S.IP.03.13 S.IP.03.14 S.IP.03.15 S.IP.03.16</p> <p>S.IA.03.11 S.IA.03.12 S.IA.03.13 S.IA.03.14 S.IA.03.15</p> <p>S.RS.03.11 S.RS.03.14 S.RS.03.15 S.RS.03.16 S.RS.03.17 S.RS.03.18 S.RS.03.19</p>	<p><u>Service Project(s)</u> Chicobags.com Recycling paper Recycling water bottles Recycling cell phones Recycling ink jet cartridges Capri Sun Project</p> <p><u>Cross Curricular Tie-in</u> Michigan History</p> <p>KWL Chart</p> <p>Discussions/presentations of experiment findings</p>	<p><u>Texts</u> Primarily Earth (AIMS) Explore Our Land – pg. 42-47 <u>Trade Books</u></p> <p><u>Videos/DVDs</u></p> <p><u>Kits</u> Look into 4th grade Rock and Mineral kit and Resources</p> <p><u>Field Trip</u> Landfill G.T. Solid Waste Plant Natural Park Oil Field Gravel Pit Wind power park</p> <p><u>Guest Speaker</u> Marlene Zylstra-Wood (Benzie Recycling Co.) – Justin Vanderlinde, DNR Conservation Officer 231-633-3825 L.I.A.A. (geography place in TC) – Cherryland Electric (wind energy)</p>	<p>Posters - Advertising</p> <p>Participation Projects – recycling (points)</p> <p>Reports-oral/written</p> <p>Rock Kit assessment</p> <p>Thank you letters to guest speakers (listing specifics)</p> <p>Journals</p> <p>Class discussions</p>

3rd Grade Curriculum Map – Science (Revised 6-10-08)

Marking Period	Content What topic(s) is being covered and what is the important vocabulary?	Skills What do students have to be able to do?	Essential Questions What are fundamental, enduring questions that will guide study and instruction?	GLCEs What content expectations are met through this topic?	Instruction What activities are used to develop the skills and knowledge?	Resources What materials, texts, videos, internet, software, or human resources support instruction?	Assessment What evidence (products and/or performances) is collected to establish that the Content and Skills have been learned?
		<ul style="list-style-type: none"> • Generate questions based on observations • Plan and conduct simple and fair investigations • Manipulate simple tools that aid observations and data collection • Make accurate measurements with appropriate units for the measurement tool • Construct simple charts and graphs from data and observations • Summarize information from charts and graphs to answer scientific questions • Share ideas about science through purposeful conversation in collaborative groups • Communicate and present findings of observations and investigations • Develop research strategies and skills for information gathering and problem solving • Compare and contrast sets of data from multiple trials of a science investigation to explain reasons for differences • Demonstrate scientific concepts through various illustrations, performances, 				<p><u>Technology</u> Video Streaming Brain Pop Website Enchanted Learning Co</p> <p><u>Misc.</u> Education of families of Recycling Worm Farm</p> <p><u>Art</u> Make recycled paper Make recycled art</p>	

3rd Grade Curriculum Map – Science (Revised 6-10-08)

Marking Period	Content What topic(s) is being covered and what is the important vocabulary?	Skills What do students have to be able to do?	Essential Questions What are fundamental, enduring questions that will guide study and instruction?	GLCEs What content expectations are met through this topic?	Instruction What activities are used to develop the skills and knowledge?	Resources What materials, texts, videos, internet, software, or human resources support instruction?	Assessment What evidence (products and/or performances) is collected to establish that the Content and Skills have been learned?	
			<p>models, exhibits, and activities</p> <ul style="list-style-type: none"> • Use data/samples as evidence to separate fact from opinion • Use evidence when communicating scientific ideas • Identify technology used in everyday life • Identify current problems that may be solved through the use of technology • Describe the effect humans and other organisms have on the balance of the natural world • Describe how people have contributed to science throughout history and across cultures 					

3rd Grade Curriculum Map – Science (Revised 6-10-08)

Marking Period	Content What topic(s) is being covered and what is the important vocabulary?	Skills What do students have to be able to do?	Essential Questions What are fundamental, enduring questions that will guide study and instruction?	GLCEs What content expectations are met through this topic?	Instruction What activities are used to develop the skills and knowledge?	Resources What materials, texts, videos, internet, software, or human resources support instruction?	Assessment What evidence (products and/or performances) is collected to establish that the Content and Skills have been learned?
-----------------------	--	--	---	---	---	--	--

MP 3	<p>Discipline: Physical Science</p> <p>Standards: Force and Motion Energy Properties of Matter</p> <p>Statements: Gravity Force Speed Forms of Energy Light Properties of Sound Conductive and Reflective Properties</p>	<p>Vocabulary:</p> <p>force gravity push pull change of motion mass weight calculate speed time distance energy sound pitch vibration reflect heat source matter</p>	<ul style="list-style-type: none"> Identify the force that pulls objects towards the Earth Describe how a push or a pull is a force Relate a change in motion of an object to the force that caused the change in motion Demonstrate how the change in motion of an object is related to the strength of the force acting upon the object and to the mass of the object Demonstrate when an object does not move in response to a force, it is because another force is acting on it Compare and contrast the motion of objects in terms or direction Identify changes in motion Calculate the speed of an object based on the distance it travels divided by the amount of time it took to travel that distance Identify light and sound as forms of energy Demonstrate that light travels in a straight line and that shadows are made by placing an object in a path of light Demonstrate what happens to light when it travels from 	<ul style="list-style-type: none"> 	<p>P.FM.03.22 P.FM.03.35 P.FM.03.36 P.FM.03.37 P.FM.03.38 P.FM.03.41 P.FM.03.42 P.FM.03.43</p> <p>P.EN.03.11 P.EN.03.21 P.EN.03.22 P.EN.03.31 P.EN.03.32</p> <p>P.PM.03.51 P.PM.03.52</p> <p>S.IP.03.11 S.IP.03.12 S.IP.03.13 S.IP.03.14 S.IP.03.15 S.IP.03.16</p> <p>S.IA.03.11 S.IA.03.12 S.IA.03.13 S.IA.03.14 S.IA.03.15</p> <p>S.RS.03.11 S.RS.03.14 S.RS.03.15 S.RS.03.16</p>	<p><u>AIMS Activities (pg. #)</u> Sound is Vibration (3) Traveling Sounds (7) Paper Cup Telephone (11) Musical Bottle Xylophone (16)</p> <p>Musical Instruments (34) The Eyes (41) Light Sources (47) Mirrors Reflect (50) Just Passing Through (55) Light Rays Slow Down (59)</p> <p>Heat Energy Moves (98) Heat Energy Travels (100)</p> <p>KWL Chart</p> <p>Discussions/presentations of experiment findings</p>	<p><u>Texts</u> Primarily Physics (AIMS) Force and Motion Book (4th grade)</p> <p><u>Trade Books</u></p> <p><u>Videos/DVDs</u></p> <p><u>Kits</u> Look into 4th grade Forces of Motion kit 2nd grade Sound kit</p> <p><u>Field Trip</u></p> <p><u>Guest Speaker(s)</u></p> <p><u>Technology</u> Websites Brain Pop Enchanted Learning Co. Video Streaming</p> <p><u>Art/Music</u> Make Instruments</p> <p><u>Misc.</u> Centrifugal Force -Water in a bucket</p>	<p>Performance on AIMS activities</p> <p>Success on activity sheet</p> <p>Drawings/posters</p> <p>Journaling</p>
------	---	---	--	--	---	---	--	--

3rd Grade Curriculum Map – Science (Revised 6-10-08)

Marking Period	Content What topic(s) is being covered and what is the important vocabulary?	Skills What do students have to be able to do?	Essential Questions What are fundamental, enduring questions that will guide study and instruction?	GLCEs What content expectations are met through this topic?	Instruction What activities are used to develop the skills and knowledge?	Resources What materials, texts, videos, internet, software, or human resources support instruction?	Assessment What evidence (products and/or performances) is collected to establish that the Content and Skills have been learned?	
			<ul style="list-style-type: none"> • water to air • Relate sounds to their sources of vibrations • Distinguish the effect of fast or slow vibrations as pitch • Demonstrate how some materials are heated more than others by light that shines on them • Explain how we need light to see objects; light from a source reflects off objects and enters our eyes • Make purposeful observations of the natural world using the appropriate senses • Generate questions based on observations • Plan and conduct simple and fair investigations • Manipulate simple tools that aid observations and data collection • Make accurate measurements with appropriate units for the measurement tool • Construct simple charts and graphs from data and observations • Summarize information from charts and graphs to answer scientific questions • Share ideas about science 				<p>Things In Motion (REMC) -Marble Madness</p> <p>Inclined Plane Lesson -4th grade unit</p> <p>Graphing/Measuring in math units</p>	

3rd Grade Curriculum Map – Science (Revised 6-10-08)

Marking Period	Content What topic(s) is being covered and what is the important vocabulary?	Skills What do students have to be able to do?	Essential Questions What are fundamental, enduring questions that will guide study and instruction?	GLCEs What content expectations are met through this topic?	Instruction What activities are used to develop the skills and knowledge?	Resources What materials, texts, videos, internet, software, or human resources support instruction?	Assessment What evidence (products and/or performances) is collected to establish that the Content and Skills have been learned?	
			through purposeful conversation in collaborative groups <ul style="list-style-type: none"> • Communicate and present findings of observations and investigations • Develop research strategies and skills for information gathering and problem solving • Compare and contrast sets of data from multiple trials of a science investigation to explain reasons for differences • Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities • Use data/samples as evidence to separate fact from opinion • Use evidence when communicating scientific ideas • Identify technology used in everyday life 					

3rd Grade Curriculum Map – Science (Revised 6-10-08)

Marking Period	Content What topic(s) is being covered and what is the important vocabulary?	Skills What do students have to be able to do?	Essential Questions What are fundamental, enduring questions that will guide study and instruction?	GLCEs What content expectations are met through this topic?	Instruction What activities are used to develop the skills and knowledge?	Resources What materials, texts, videos, internet, software, or human resources support instruction?	Assessment What evidence (products and/or performances) is collected to establish that the Content and Skills have been learned?
MP 4	<p>Discipline: Life Science</p> <p>Standards: Organization of Living Things Evolution</p> <p>Statements: Structures and Functions Classification Environmental Adaptation</p>	<p>Vocabulary:</p> <p>classify flower stem root characteristic organism limb physical function fruit seed life cycle environment adaptation backbone scales skin fur beaks cold blooded warm blooded protection habitat</p>	<ul style="list-style-type: none"> Describe the function of the following plant parts: flower, stem, root, and leaf Classify plants on the basis of observable physical characteristics Relate characteristics and functions of observable parts in a variety of plants that allow them to live in their environment Identify and compare structures in animals used for controlling body temperature, support, movement, food-getting, and protection Classify animals on the basis of observable physical characteristics Relate characteristics and functions of observable body parts to the ability of animals to live in their environment Make purposeful of the natural world using the appropriate senses Generate questions based on observations Plan and conduct simple and fair investigations Manipulate simple tools that aid observations and data collection Make accurate measurements with appropriate units for the measurement tool. Construct simple charts and graphs from data and observations summarize information from charts and graphs to answer scientific questions Share ideas about science through purposeful conversation in collaborative groups Communicate and present findings of observations and investigations Develop research strategies and skills for information gathering and problem solving Compare and contrast sets of data from multiple trials of a science investigation to explain reasons for differences Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities Use data/samples as evidence to separate fact from opinion Use evidence when communicating scientific ideas Identify technology used in everyday life 	<ul style="list-style-type: none"> L.O.L.03.31 L.O.L.03.32 L.O.L.03.41 L.O.L.03.42 L.EV.03.11 L.EV.03.12 S.IP.03.11 S.IP.03.12 S.IP.03.13 S.IP.03.14 S.IP.03.15 S.IP.03.16 S.IA.03.11 S.IA.03.12 S.IA.03.13 S.IA.03.14 S.IA.03.15 S.RS.03.11 S.RS.03.14 S.RS.03.15 S.RS.03.16 	<p>R.O.P.-What are Plants Like Lessons 1-5</p> <p>KWL Chart</p> <p>Discussions/presentations of experiment findings</p> <p>Power Point on an animal</p> <p>Brochure on an animal</p> <p>Research paper</p> <p>Create a poster/collage</p>	<p><u>Texts</u></p> <p><u>Trade Books</u> Ranger Rick See 2nd grade bats/animals Zoo Books National Geographic</p> <p><u>Videos/DVDs</u></p> <p><u>Kits</u> Running on Plants – Clusters 1 & 2</p> <p><u>Field Trip</u> Greenhouse trip</p> <p><u>Guest Speaker(s)</u> Ranger-Parks/Service-animals Justin Vanderlinde – DNR Conservation Officer 231-633-3825</p> <p><u>Technology</u> www.enchantedlearning.com Videostreaming</p> <p><u>Misc.</u></p>	<p>ELA prompt (rubric w/examples of each)</p> <p>Sorting game</p> <p>Vocabulary matching</p>