
Fifth Grade Science

Curriculum Guide

Scranton School District

Scranton, PA



**Scranton School District
Curriculum Guide**

Fifth Grade Science

Pre-requisite: Successful Completion of Fourth Grade Science

Fifth Grade Science establishes strong scientific thinking and problem solving skills necessary for further work in science. This course involves working with inquiry based experiences, constructing explanations, and analyzing/interpreting data and nonfiction information. Topics presented in this course include but are not necessarily limited to scientific inquiry, variables (independent/dependent), scientific instruments/scales, scientific systems, scientific models, patterns, matter, energy types, energy sources, electricity and magnetism, water system, cells and traits, relationships between organisms, geologic processes, relationships between objects in our solar system, and wetland and ecosystems.

At the culmination of this course, the students will have a solid understanding of fifth grade science standards and will have a good foundation for six grade science.

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Year-at-a-glance

Subject: Fifth Grade Science	Grade Level: 5	Date Completed: 9/10/15
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1st Quarter

Topic	Resources	Academic Standards
Nature of Science: Reasoning and Analysis	District Approved Text Book and Support Materials	3.1.5.A; 3.4.5.A; 3.4.5.B; 3.4.5.C; 3.4.5.D; 3.4.5.E
Nature of Science: Processes, Procedures, and Tools of Scientific Investigation	District Approved Text Book and Support Materials	3.1.5.A; 3.4.5.A; 3.4.5.C; 3.4.5.D
Nature of Science: Systems, Models, and Patterns	District Approved Text Book and Support Materials	3.1.5.A

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2nd Quarter

Topic	Resources	Academic Standards
Renewable and Non-Renewable Resources	District Approved Text Book and Support Materials	3.1.5.A; 3.3.5.A; 4.5.5.D
Plant Growth and its Relationship to Renewable Resources	District Approved Text Book and Support Materials	3.1.5.A; 3.3.5.A2; 4.5.5.D
Cell Structure and Function	District Approved Text Book and Support Materials	3.1.5.A
Traits and Behaviors	District Approved Text Book and Support Materials	3.1.5.B1; 3.1.5.C1
Relationships Between Organisms and Different Ecosystems	District Approved Text Book and Support Materials	4.1.5.C; 3.3.5.A2

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3rd Quarter

Topic	Resources	Academic Standards
Physical Properties of Matter	District Approved Text Book and Support Materials	3.2.5.A; 3.2.5.A1; 3.3.5.A4; 3.3.5.A1
Chemical and Physical Changes of Matter	District Approved Text Book and Support Materials	3.2.5.B2; 3.2.5.B3; 3.2.5.B5
Energy Types, Sources, and Changes	District Approved Text Book and Support Materials	3.2.5.B4
Relationships Between Mass, Force, and Movement	District Approved Text Book and Support Materials	3.2.5.B1
Magnets and Electricity Produce Related Forces	District Approved Text Book and Support Materials	3.2.5.B4

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4th Quarter

Topic	Resources	Academic Standards
Constructive/Destructive Natural Processes	District Approved Text Book and Support Materials	3.3.5.A
Earth's Water Systems	District Approved Text Book and Support Materials	3.2.5.A1; 4.2.5.C; 4.2.5.B; 3.3.5.A4; 3.3.5.A5; 4.2.5.A
Weather and Climate	District Approved Text Book and Support Materials	3.2.5.A1; 3.3.5.A4; 3.3.5.A5; 4.2.5.A
Relationships in our Solar Systems	District Approved Text Book and Support Materials	3.3.5.B

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General Topic	Academic Standard(s)	Essential Knowledge, Skills & Vocabulary	Resources & Activities	Assessments	Suggested Time
<p><u>The Nature of Science</u></p> <p>Reasoning and Analysis</p>	<p>3.4.5A 3.4.5B 3.4.5C 3.4.5D 3.4.5E</p>	<p>Explain how certain questions can be answered through scientific inquiry and/or technological design (e.g., investigate to find out if all clay or foil boats designed react the same when filled with paperclips).</p> <ul style="list-style-type: none"> • Control variable • variable • draw conclusions • experiment • hypothesis • innovation* • invention* • investigation <p><i>*contained in the Academic Standards for Science and Technology and Engineering Education</i></p>	<p>District Approved Text Book District Approved Lab Manual District Approved Science Leveled Readers Safari Montage</p> <p>http://star.spsk12.net/science/science_05.htm</p> <p>http://www.nhusd.k12.ca.us/o/Nutrition_Serv/shape_grant/5thgrade_pum.pdf</p> <p>http://sciencespot.net/Pages/classgen.html#Anchor3</p> <p>http://bowenpeters.weebly.com/scientific-method.html</p> <p>https://sites.google.com/a/mystma.org/mrs-pratt-s-5th-grade/variables-scientific-method-unit-1</p> <p>http://nces.ed.gov/nceskids/createagraph/</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports</p>	<p>1st Quarter maximum 45 days</p>

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	<p>3.1.5.A9 3.4.5.C2 3.4.5.C3 3.4.5.D1 3.4.5.D3</p>	<p>Explain how observations and/or experimental results are used to support inferences and claims about an investigation or relationship (e.g., make a claim based on information on a graph).</p> <ul style="list-style-type: none"> • classify • conclusion • compare • evidence • fact • infer • interpret Data • measure • observe • predict • scientific method • theory 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Leveled Readers Interactive Notebook Safari Montage</p> <p>www.sciencespot.net</p> <p>http://bowenpeters.weebly.com/scientific-method.html</p> <p>https://sites.google.com/a/mystma.org/mrs-pratt-s-5th-grade/variables-scientific-method-unit-1</p> <p>http://nces.ed.gov/nceskids/createagraph/</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports, Interactive Notebook</p>	
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	<p>3.1.5.A9 3.4.5.C1 3.4.5.C3 3.4.5D2 3.4.5.E1</p>	<p>Describe how explanations, predictions, and models are developed using evidence.</p> <ul style="list-style-type: none"> • evidence • model • prototype * <p><i>*contained in the Academic Standards for Science and Technology and Engineering Education</i></p>	<p>District Approved Text Book District Approved Lab Manual District Approved Science Leveled Readers Interactive Notebooks Safari Montage</p> <p>www.sciencespot.net</p> <p>http://nces.ed.gov/nceskids/createagraph/</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports, Interactive Notebooks</p>	
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<p><u>The Nature of Science</u></p> <p>Processes, Procedures, and Tools of Scientific Investigation</p>	<p>3.1.5.A 3.4.5.A9 3.4.5.C1 3.4.5.C2 3.4.5.D1 3.4.5.D2</p>	<p>Design a simple, controlled experiment (fair test) identifying the independent and dependent variables, how the dependent variable will be measured and which variables will be held constant (e.g., relate the effect of variables [mass, release height, length of string] to number of swings of a pendulum, investigate the relationships between variables in paper airplane designs).</p> <ul style="list-style-type: none"> • balance • dependent variable • design * • dropper • forceps • graduated cylinder • independent variable • magnifying glass • measuring cup • microscope • ruler • spring scale • tape measure • thermometer 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Leveled Readers Interactive Notebooks Safari Montage</p> <p>www.sciencespot.net</p> <p>http://nces.ed.gov/nceskids/createagraph/</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports, Interactive Notebooks</p>	
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	<p>3.1.5.A 3.4.5.A9 3.4.5.D2</p>	<p>Describe relationships between variables through interpretation of data and observations (i.e., make predictions for the outcome of controlled experiment using data tables and graphs).</p> <ul style="list-style-type: none"> • communicate results • control • dependent variable • draw conclusions • hypothesis • independent variable 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage</p> <p>www.sciencespot.net</p> <p>http://nces.ed.gov/nceskids/createagraph/</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports, Interactive Notebooks</p>	
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	<p>3.1.5.A 3.4.5.A1 3.4.5.D2</p>	<p>Describe the appropriate use of instruments and scales to accurately measure time, mass, distance, volume, and temperature safely under a variety of conditions (e.g., use the thermometer to observe and compare the interaction of food coloring in water at different temperatures).</p> <ul style="list-style-type: none"> • balance • Celsius • design * • distance • dropper • Fahrenheit • forceps • independent variable • magnifying glass • mass • measuring cup • metric system • microscope • ruler • spring scale • tape measure • temperature • time • thermometer • volume 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage</p> <p>http://sciencespot.net/Pages/classmetric.html</p> <p>www.sciencespot.net</p> <p>http://nces.ed.gov/nceskids/createagraph/</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports, Interactive Notebooks</p>	
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	<p>3.1.5.A 3.4.5.A3 3.4.5.C3 3.4.5.D1 3.4.5.D3</p>	<p>Explain how technology extends and enhances human abilities for specific purposes (e.g., use hand lens to examine crystals in evaporation dishes; use graduated cylinders to measure the amount of water used in a controlled plant experiment).</p> <ul style="list-style-type: none"> • technology 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Leveled Readers Interactive Notebooks Safari Montage</p> <p>www.sciencespot.net</p> <p>http://nces.ed.gov/nceskids/createagraph/</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports, Interactive Notebooks</p>	
<p><u>The Nature of Science</u></p> <p>Systems, Models, and Patterns</p>	<p>3.1.5.A</p>	<p>Make predictions based on patterns in natural systems (e.g., phases of the Moon, time [day, month, and year], weather, and seasons).</p> <ul style="list-style-type: none"> • natural system • pattern • prediction 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Leveled Readers Interactive Notebooks Safari Montage</p> <p>www.sciencespot.net</p> <p>http://nces.ed.gov/nceskids/createagraph/</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports, Interactive Notebooks</p>	

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	3.1.5.A	Describe how models are used to better understand the relationships in natural systems (e.g., water cycle, Sun-Earth-Moon system, ecosystems, observe and draw a diagram to show the effects of flowing water in a watershed). <ul style="list-style-type: none"> • model • natural systems • prototype 	District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage www.sciencespot.net http://nces.ed.gov/nceskids/createagraph/	Teacher prepared tests, quizzes, rubrics, projects, lab reports, Interactive Notebooks	2 nd Quarter maximum 45 days
<u>Biological Science</u> Ecological Behavior and Systems	3.1.5.A	Identify fossil fuels and alternative fuels used by humans. <ul style="list-style-type: none"> • Fossil • Resource • Nonrenewable Resource • Conservation • Renewable Resource • Pollution • Point Pollution • Non-Point Pollution 	District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage http://www.neok12.com/Ecosystems.htm http://www.childrensuniversity.manchester.ac.uk/interactive/science/energy/renewable/ http://www.blm.gov/wo/st/en/res/Education_in_BLM/Learning_Landscapes/For_Teachers/activities.html http://www.ecofriendlykids.co.uk/naturalresourceearth.html ! http://www.eia.gov/kids/energy.cfm?page=2 http://www.childrensuniversity.manchester.ac.uk/interactive/science/energy/renewable/	Teacher prepared tests, quizzes, rubrics, projects, lab reports	

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	3.3.5.A2	Describe the usefulness of Earth's physical resources as raw materials for the human-made world.	District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage	Teacher prepared tests, quizzes, rubrics, projects, lab reports	
	4.5.5.D	Explain how different items are recycled and reused. <ul style="list-style-type: none"> • Recycle • Reuse 	District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage	Teacher prepared tests, quizzes, rubrics, projects, lab reports	
<u>Biological Sciences</u> Structure and Function of Organisms	3.1.5.A5	Recognize that all organisms are composed of cells. <ul style="list-style-type: none"> • Cell • Organism 	District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage	Teacher prepared tests, quizzes, rubrics, projects, lab reports	
	3.1.5.A5	Explain the concept of a cell as the basic unit of life.	District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage	Teacher prepared tests, quizzes, rubrics, projects, lab reports	

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	3.1.5.A5	<p>Compare the structure and function of basic cell parts in organisms (i.e., plants and animals)</p> <ul style="list-style-type: none"> • Nucleus • Cell Membrane • Cytoplasm • Cell Wall • Chloroplast 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage</p> <p>http://www.biology4kids.com/files/cell_main.html</p> <p>https://www.youtube.com/watch?v=-zafJKbMPA8</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports</p>	
<p><u>Biological Sciences</u></p> <p>Continuity of Life</p>	3.1.5.B1	<p>Differentiate between inherited and acquired traits (i.e., scars, injuries)</p> <ul style="list-style-type: none"> • Inherited trait • acquired trait • dominant trait • recessive trait • Punnett Square 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage</p> <p>http://learn.genetics.utah.edu/content/inheritance/activities/</p> <p>http://www.google.com/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=8&ved=0CEsQFjAHahUKEwilwM6aysTHAhUMOj4KHfxtDxU&url=http%3A%2F%2Fwww.stlouisschools.net%2Fsite%2Fhandlers%2Ffiledownload.ashx%3Fmoduleinstanceid%3D1938%26dataid%3D3090%26FileName%3Dinherited%2520vs%2520learned%2520traits%2520and%2520activities.doc&ei=143cVeX4Foz0-AH8272oAQ&usg=AFQjCNG-6rC3DydYCTONBP19seWZ3d3S9w</p> <p>http://www.sciencebuddies.org/science-activities?gclid=CL_LquHKxMcCFYMWHwodRI8Egw</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports</p>	

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	3.1.5.C1	<p>Explain how inherited traits help organisms survive and reproduce in different environments.</p> <ul style="list-style-type: none"> • predator • prey 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports</p>	
	3.1.5.C1	<p>Identify changes in environmental conditions that can affect the survival of populations and entire species.</p> <ul style="list-style-type: none"> • population • population dynamics • community • competition • symbiosis • predator • prey • succession • extinction • pollution 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage</p> <p>http://ysp.wustl.edu/KitCurriculum/EcologicalInteractions/ECOevo_Ecological%20Interactions%20Kit_TeacherHandout.pdf</p> <p>http://www.mnh.si.edu/education/printable_resources/09-10lessonplanecosystems.pdf</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports</p>	
	3.1.5.A1	<p>Explain how certain behaviors help organisms survive and reproduce in different environments.</p> <ul style="list-style-type: none"> • adaptations 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports</p>	

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<p><u>Biological Sciences</u></p> <p>Ecological Behavior and Systems</p>	<p>4.1.5.C</p>	<p>Describe the roles of producers, consumers, and decomposers within a local ecosystem.</p> <ul style="list-style-type: none"> • Producers • Consumers • Ecosystem • Herbivore • Carnivore • Decomposer • Food web • Energy pyramid 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Leveled Readers Interactive Notebooks Safari Montage</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports</p>	
	<p>3.3.5.A2</p>	<p>Describe the relationships between organisms in different food webs</p> <ul style="list-style-type: none"> • Food web • Food chain 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Leveled Readers Interactive Notebooks Safari Montage</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports</p>	

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<p><u>Physical Sciences</u></p> <p>Structure, Properties, and Interaction of Matter and Energy</p>	<p>3.2.5.A</p>	<p>Identify characteristic properties of matter that are independent of mass and volume.</p> <ul style="list-style-type: none"> • Matter • Mass • Volume • Density • Molecule • Nucleus • Element 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage</p> <p>http://www.chem4kids.com/files/matter_intro.html</p> <p>http://interactivesites.weebly.com/matter-chemical-physical.html</p> <p>http://www.scholastic.com/teachers/activity/matter-9-studyjams-interactive-science-activities</p> <p>http://www.neok12.com/Laws-of-Motion.htm</p> <p>http://www.3teacherchicks.blogspot.com/2012/03/fabulous-force-and-motion.html</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports</p>	<p>3rd Quarter maximum 45 days</p>
	<p>3.2.5.A</p>	<p>Differentiate between mass and volume.</p> <ul style="list-style-type: none"> • Mass • Volume • Atom 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports</p>	

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	<p>3.2.5.A1 3.3.5.A4</p>	<p>Describe how water changes from one state to another.</p> <ul style="list-style-type: none"> • Boiling Point • Freezing Point • Water Cycle • Evaporation • Condensation • Precipitation • Hydrological Cycle • Hydrosphere 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports</p>	
	<p>3.3.5.A1</p>	<p>Identify differences between chemical and physical changes of matter.</p> <ul style="list-style-type: none"> • Physical Change • Mixture • Solution • Reactivity • Combustibility 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports</p>	

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<p><u>Physical Sciences</u></p> <p>Forms, Sources, Conversion, and Transfer of Energy</p>	<p>3.2.5.B2 3.2.5.B3 3.2.5.B5</p>	<p>Describe how energy exists in many forms (e.g., electrical, mechanical, chemical, heat, light, sound) and can be transformed within a system.</p> <ul style="list-style-type: none"> • Energy • System • Energy Transfer • Solar Energy • Light • Chemical • Mechanical • Electrical • Heat • Sound • Conductor • Insulator 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage</p> <p>http://www.energykids.eu/energy-transform</p> <p>http://www.fplsafetyworld.com/?ver=kkblue&utilid=fplforkids&id=16168</p> <p>http://www.eia.gov/kids/energy.cfm?page=2</p> <p>http://www.neok12.com/Energy-Sources.htm</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports</p>	
	<p>3.2.5.B4</p>	<p>Describe how heat energy is usually a byproduct of an energy transformation.</p> <ul style="list-style-type: none"> • System • Convection • Conduction • Radiation • Reflection 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports</p>	

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	3.2.5.B2	Distinguish between kinetic and potential energy. <ul style="list-style-type: none"> • Kinetic • Potential 	District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage	Teacher prepared tests, quizzes, rubrics, projects, lab reports	
	3.2.5.B2	Explain how energy is conserved.	District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage PPL Think Energy Presentation http://www.tvakids.com/electricity/conservation.htm http://www.energyquest.ca.gov/saving_energy/	Teacher prepared tests, quizzes, rubrics, projects, lab reports	
<u>Physical Sciences</u> Principles of Motion and Force	3.2.5.B1	Differentiate between the mass and weight of an object. <ul style="list-style-type: none"> • Mass • Weight 	District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage	Teacher prepared tests, quizzes, rubrics, projects, lab reports	
	3.2.5.B1	Explain how the mass of an object resists change to motion (inertia). <ul style="list-style-type: none"> • motion • inertia 	District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage http://www.3teacherchicks.blogspot.com/2012/03/fabulous-force-and-motion.html	Teacher prepared tests, quizzes, rubrics, projects, lab reports	

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	3.2.5.B4	<p>Recognize that moving electrical charges produce magnetic forces and moving magnets produce electric forces (electromagnetism).</p> <ul style="list-style-type: none"> • Electricity • Magnetic • electromagnetism 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage</p> <p>http://www.neok12.com/Electromagnetism.htm</p> <p>http://sciencewithkids.com/Experiments/Energy-Electricity-Experiments/how-to-make-electromagnet.html</p>	Teacher prepared tests, quizzes, rubrics, projects, lab reports	
	3.2.5.B4	<p>Identify variables within an electric current (i.e., voltage, current, and resistance).</p> <ul style="list-style-type: none"> • Current • Voltage • Resistance • Amps • Volts 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage</p> <p>http://www.fplsafetyworld.com/?ver=kkblue&utilid=fplforkids&id=16184</p>	Teacher prepared tests, quizzes, rubrics, projects, lab reports	

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<p><u>Earth and Space Sciences</u></p> <p>Earth Features and Processes That Change the Earth and Its Resources</p>	<p>3.3.5.A</p>	<p>Differentiate between abrupt changes in Earth’s surface (e.g., earthquakes, volcanoes, meteor impacts, landslides) and gradual changes in Earth’s surface (e.g., lifting up of mountains, wearing away by erosion).</p> <ul style="list-style-type: none"> • Erosion • Plate Tectonics 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Leveled Readers Interactive Notebooks Safari Montage</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports</p>	<p>4th Quarter maximum 45 days</p>
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	<p>3.3.5.A</p>	<p>Explain how geological processes observed today (e.g., erosion, changes in the composition of the atmosphere, volcanic eruptions, earthquakes) are similar to those in the past.</p> <ul style="list-style-type: none"> • Weathering • Erosion • Rock Cycle • Geology • Landform • Topography • Glacier • Sand Dune • Delta • Sinkhole • Plate • Earthquake • Epicenter • Fault • Magma • Lava • Volcano 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Leveled Readers Interactive Notebooks Safari Montage</p> <p>https://elementarysciencetech.wikispaces.com/S5E1+Constructive+%26+Destructive+Processes</p> <p>http://www.ehow.com/info_8516441_activities-constructive-destructive-forces-earth.html</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports</p>	
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	<p>3.2.5.A1 4.2.5.C</p>	<p>Identify physical, chemical, and biological factors that affect water quality.</p> <ul style="list-style-type: none"> • Biochemical • Watershed • Waste Stream • Aquatic • Bacteria • Clarity • Fresh Water • Lentic • Lotic • Aeration • pH • Sewage • Sludge • Bioindicators • Turbidity • Non-point Source Pollution • Point Source Pollution 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Leveled Readers Interactive Notebooks Safari Montage PA American Water Presentation</p> <p>http://water.usgs.gov/edu/waterquality.html</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports</p>	
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	4.2.5.B	<p>Describe the importance of wetlands in an ecosystem.</p> <ul style="list-style-type: none"> • Wetlands • Ecosystem • Reclamation • Purification • Saturated • Estuaries 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage</p> <p>http://kids.nceas.ucsb.edu/biomes/freshwaterwetlands.html</p> <p>http://idahoptv.org/dialogue4kids/season6/wetlands/wetland.cfm</p> <p>http://water.epa.gov/type/wetlands/outreach/education_index.cfm</p>	Teacher prepared tests, quizzes, rubrics, projects, lab reports	
	3.2.5.A1 3.3.5.A4 3.3.5.A5 4.2.5.A	<p>Explain how the cycling of water into and out of the atmosphere impacts climatic patterns.</p> <ul style="list-style-type: none"> • Air Mass • Front • Climate 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage</p>	Teacher prepared tests, quizzes, rubrics, projects, lab reports	
	3.3.5.A5	<p>Explain the effects of the oceans and lakes on climate.</p> <ul style="list-style-type: none"> • Stream Order • Humidity • Air Pressure • Evaporation • Condensation • Precipitation • Fog 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Levelled Readers Interactive Notebooks Safari Montage</p> <p>http://climatekids.nasa.gov/ocean/</p> <p>http://stpmuskego.org/home/140003034/140003334/Lesson%202-3.pdf</p>	Teacher prepared tests, quizzes, rubrics, projects, lab reports	

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<p><u>Earth and Space Sciences</u></p> <p>Composition and Structure of the Universe</p>	<p>3.3.5.B</p>	<p>Describe the patterns of Earth's rotation and revolution in relation to the Sun and Moon (i.e., solar eclipse, phases of the Moon, and time).</p> <ul style="list-style-type: none"> • Sun • Rotate • Axis • Revolve • Orbit • Equator • Moon • Crater • Moon Phase • Eclipse • Refraction • Full Moon • Waxing Gibbous • First Quarter • Waxing Crescent • New Moon • Waning Crescent • Third Quarter • Waning Gibbous 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Leveled Readers Interactive Notebooks Safari Montage</p> <p>http://www.primaryhomeworkhelp.co.uk/moon/phases.html</p> <p>http://www.planetsforkids.org/moon-moon.html</p> <p>http://mrnussbaum.com/space/moonphases/</p> <p>https://www.youtube.com/watch?v=id3fFL_98W8</p> <p>https://www.youtube.com/watch?v=hMUITLAv0s</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports</p>	
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	3.3.5.B	<p>Compare the general characteristics of the inner planets of our solar system (i.e., size, orbital path, surface characteristics, and moons).</p> <ul style="list-style-type: none"> • Solar System • Star • Constellation • Planet • Universe • Galaxy • Telescope • Orbital Path • Surface • Mercury • Venus • Earth • Mars • Inner Planet 	<p>District Approved Text Book District Approved Lab Manual District Approved Science Leveled Readers Interactive Notebooks Safari Montage</p> <p>http://study.com/academy/lesson/inner-planets-of-the-solar-system-mercury-venus-earth-mars.html</p> <p>http://www.msnucleus.org/membership/html/jh/earth/solarsystem/jhsolar.pdf</p> <p>http://studyjams.scholastic.com/studyjams/jams/science/solar-system/solar-system-inner.htm</p>	<p>Teacher prepared tests, quizzes, rubrics, projects, lab reports</p>	
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