

**Science Pacing Guide
Kindergarten**

October	February	March	April
Fall/Apples <u>Battle Creek Unit 1: Senses</u>	Dental Unit (Michigan Model)	Water/Oceans Unit <u>Battle Creek Unit 2: It is Living?</u>	<u>Battle Creek Unit 2: It is Living?</u> <u>Battle Creek Unit 3: My Earth</u>

May	June
Caterpillars/Butterflies Unit Battle Creek Unit 4: <u>Kindergarten in Motion</u>	Bears/Camping Unit

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Processes, Content Statements & Expectations (Disciplinary Knowledge)	Science Unit	Resources	Vocabulary	Assessment
<p>K- S.IP.00.11 Make purposeful observation of the natural world using the appropriate senses.</p> <p>K- S.IP.00.12 Generate questions based on observations using the senses.</p> <p>K- S.IP.00.16 Construct simple charts from data and observations.</p> <p>K- S.IA.00.12 Share ideas about the senses through purposeful conversation.</p> <p>K- S.IA.00.13 Communicate and present findings of observations.</p> <p>K- S.IA.00.14 Develop strategies for information gathering (ask an expert, use a book, make observations, conduct simple investigations, and watch a video).</p> <p>K- S.RS.00.11 Demonstrate science concepts about the senses through illustrations, performances, models.</p>	<p>Unit 1: Senses</p>	<p>Battle Creek Science Kit</p> <p>Teacher Guide: “Senses” 3 ring binder</p> <p>Book: <u>My Five Senses</u>, Aliko, 1991.</p> <p>Book: <u>The Listening Walk</u></p> <p>Book: <u>Arthur’s Glasses</u></p> <p>“5 Senses Song” By Dr. Jean</p>	<p>senses observation sight sound taste touch smell feel hand lens microscope binoculars telescope sweet salty bitter sour eyes ears nose skin hands feet mouth tongue color food freezing heat light shape size</p>	<p>Student Journal</p> <p>Pre and Post Test</p> <p>Teacher observations</p>

Processes, Content Statements & Expectations (Disciplinary Knowledge)	Science Unit	Resources	Vocabulary	Assessment
<p>K- E.SE.00.11 Identify Earth materials (air, water, soil) that are used to grow plants.</p> <p>K- L.OL.00.11 Recognize that living things have basic needs.</p> <p>K- L.OL.00.12 Identify and compare living and nonliving things.</p>	<p>Unit: Fall/Apples</p>	<p>Big Book: <u>Apple a Day</u></p> <p>Big Book: <u>Johnny Appleseed</u></p> <p>Book: <u>Apples on Top</u> Dr. Seuss</p> <p>Field Trip to Uncle John's Cider Mill, St. John's, MI</p>	<p>fall seasons apples life cycle water soil sunlight seeds seedling tree orchard skin core flesh juice cider green yellow red graph favorite more less fewer</p>	<p>Plant life cycle activities/sequencing</p> <p>Teacher observations</p>

Processes, Content Statements & Expectations (Disciplinary Knowledge)	Science Unit	Resources	Vocabulary	Assessment
<p>K- L.OL.00.11 Recognize that living things have basic needs.</p> <p>K- L.OL.00.12 Identify and compare living and nonliving things.</p>	<p>Unit 2: It is Living?</p>	<p>Battle Creek Science Kit</p> <p>Teacher Guide: “Is It Living?” 3 ring binder</p> <p>Book: <u>The Tiny Seed</u> By Eric Carle (in science kit)</p> <p>VHS: “See How It Grows”</p> <p>United Streaming: “The Magic School Bus Gets Planted”</p> <p>Book: <u>Marvelous Worms</u> (in science kit)</p> <p>Book: <u>A Frog Has a Sticky Tongue</u> (in science kit)</p>	<p>living nonliving basic needs characteristics classify sort plants seeds animals life cycle hand lens air water light soil food nutrients live reproduce plant growth chart observations environment habitat worms label</p>	<p>Student Journal Pre and Post Test</p> <p>Teacher observations</p>

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<p>K- E.SE.00.11 Identify Earth materials (air, water, soil) that are used to grow plants.</p>	<p>Unit 3: My Earth</p>	<p>Battle Creek Science Kit</p> <p>Teacher Guide: “My Earth” 3 ring binder</p> <p>Book: <u>The Earth</u></p> <p>Book: <u>Kids Keeping the Land, Air, and Water Clean</u> (in science kit)</p> <p>United Streaming: “Magic School Bus: Rocks and Rolls”</p>	<p>Earth earth- materials planet water land air globe map hand lens observations similarities differences soil sand grow plants rocks granite lime stone evidence investigations recycle reduce reuse conserve liter garbage pollution citizen</p>	<p>Student Journal Pre and Post Test</p> <p>Teacher observations</p>

Processes, Content Statements & Expectations (Disciplinary Knowledge)	Science Unit	Resources	Vocabulary	Assessment
<p>K- L.OL.00.11 Recognize that living things have basic needs.</p> <p>K- L.OL.00.12 Identify and compare living and nonliving things.</p> <p>1st grade- L.OL.01.21 Describe the life cycle of animals including the following stages: egg, young, adult; egg, larva, pupa, adult</p>	<p>Unit: Caterpillars and Butterflies</p>	<p>Book: <u>The Very Hungry Caterpillar</u> By Eric Carle</p> <p>Song: “Pretty Butterfly”</p> <p>VHS: “The Very Hungry Caterpillar” (compare/contrast with book)</p> <p>Smart Board demonstration: Venn diagram</p> <p>VHS/DVD: “Fascinating World of Butterflies”</p>	<p>egg caterpillar larva pupa chrysalis cocoon butterfly life cycle metamorphosis change insect head abdomen thorax antennae proboscis feeding tube nectar flower painted ladies monarch swallowtail species kinds</p>	<p>Butterfly life cycle sequencing activities</p> <p>Venn diagram: compare/contrast</p> <p>Teacher observations</p>

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<p>P.FM.00.11 Describe the position of an object (above, below, in front of, behind, on) in relation to other objects.</p> <p>P.FM.00.12 Describe the direction of a moving object (for example: away from or closer to) from different observers' view.</p> <p>P.FM.00.21 Observe how objects fall toward the Earth 6</p> <p>P.FM.00.31 Demonstrate pushes and pulls on objects that can move.</p> <p>P.FM.00.32 Observe that objects initially t rest will move in the direction of a push or a pull.</p> <p>P.FM.00.33 Observe how pushes and pulls can change the speed or direction of moving objects.</p> <p>P.FM.00.34 Observe how the shape and mass of an object can affect motion.</p>	<p>Unit 4: Kindergarten in Motion</p>	<p>Battle Creek Science Kit</p> <p>Teacher Guide: “Kindergarten in Motion” 3 ring binder</p> <p>Book: <u>Sheep in a Jeep</u> (reading series)</p> <p>Book: <u>They All Shouted Pull</u> (science kit)</p> <p>Book: <u>Move It! Motion Forces and You</u> (science kit)</p> <p>Book: <u>On the Go!</u> (reading series)</p> <p>Book: <u>Fall Down</u> (science kit)</p>	<p>push pull force motion movement gravity position objects objects Earth observations investigation charts data compare describe</p>	<p>Student Journal Pre and Post Test</p> <p>Teacher observations</p>

Processes, Content Statements & Expectations (Disciplinary Knowledge)	Science Unit	Resources	Vocabulary	Assessment
<p>K- S.IP.00.11 Make purposeful observation of the natural world using the appropriate senses.</p>	<p>Unit: Bears and Camping</p>	<p>Big Book: <u>Just like Daddy</u> (reading series)</p> <p>Book: <u>This is the Bear and the Picnic Lunch</u> (reading series)</p> <p>Book: <u>Two Bear Cubs</u> (reading series)</p> <p>Book: <u>The Three Bears</u></p> <p>Nature/Outdoors Dramatic Play Tent</p>	<p>bears real pretend fantasy facts fiction nonfiction same different insects camping gear animals habitat nature outdoors fish kit tent fire</p>	<p>Venn Diagram Compare/contrast (real/pretend)</p> <p>(facts/fiction)</p> <p>Teacher observations</p>

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<p>K- L.OL.00.11 Recognize that living things have basic needs. (human needs, dental care, health)</p>	<p>Unit: Dental Health Michigan Model Unit</p>	<p>Michigan Model Dental Kit (red box)</p> <p>Book: <u>My Bright Smile</u></p> <p>Book: <u>Moose’s Loose Tooth</u></p> <p>Book: <u>The Lost Tooth Club</u></p> <p>Video (VHS) “Legend of the Tooth Kingdom”</p> <p>Plastic tooth model</p>	<p>dental teeth</p> <p>toothpaste</p> <p>floss</p> <p>brushing</p> <p>flossing</p> <p>dentist</p> <p>plaque</p> <p>sugar</p> <p>cavities</p> <p>fillings</p> <p>crown</p> <p>root</p> <p>gum</p> <p>incisors</p> <p>molars</p> <p>prevention</p> <p>healthy foods</p> <p>junk food</p> <p>good habits</p>	<p>Happy/Sad Tooth Sorting Activity</p> <p>Parts of a tooth diagram/labeling</p> <p>Teacher observations</p>

Processes, Content Statements & Expectations (Disciplinary Knowledge)	Science Unit	Resources	Vocabulary	Assessment
<p>K- E.SE.00.11 Identify Earth materials (water/land).</p> <p>K- L.OL.00.11 Recognize that living things have basic needs.</p> <p>K- L.OL.00.12 Identify and compare living and nonliving things.</p>	<p>Unit: Water and Oceans</p>	<p>Book: <u>Mr. Gumpy’s Outing</u> (reading series)</p> <p>Book: <u>Who Sank the Boat?</u></p> <p>Book: <u>Rain Puddle</u> (reading series)</p> <p>Book: <u>Itsy Bitsy Spider</u></p> <p>Book: <u>Swimmy</u> by Leo Lionni (Title 1 room)</p> <p>Book: <u>Dolphins At Daybreak</u></p> <p>Magic School Bus Series</p> <p>Book/CD: <u>The Octopus Song</u> By Charlotte Diamond</p> <p>Sink/Float tinfoil boat</p>	<p>water needs basic needs sink float experiment water liquid solid gas water cycle precipitation evaporation condensation conserve ocean salt water fresh water habitat food chain whales sharks fish octopus school of fish</p>	<p>Food chain murals</p> <p>Group habitat murals</p> <p>Water cycle diagrams</p> <p>Map skills: Identify water and land</p> <p>Teacher observations</p>