

# Blackhawk School District

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## CURRICULUM

|                    |                                |
|--------------------|--------------------------------|
| Course Title:      | Science                        |
| Grade Level(s):    | Kindergarten                   |
| Length of Course:  | 10 lessons throughout the year |
| Faculty Author(s): | Sue Badzik/Dawn Kinger         |
| Date:              | February 2014                  |

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### MISSION STATEMENT:

The goal of science education is to develop within students an understanding of the world around us by fostering curiosity, developing inquiry skills, and creating an excitement for learning science.

### COURSE DESCRIPTION:

Science in kindergarten will be, for the most part, taught through the realm of reading. Children's literature in both the reading series and the RTS lessons will be used. The following lessons are designed to create a science foundation for kindergarten students through the use of effective read alouds and common lessons. The common lessons are focused around the seasons, plant growth, animal and their habitats and land. Daily discussions and lessons will provide teachable moments and opportunities to discuss other important aspects of science.

The following outline provides a general overview of the course content, not a chronological timetable. The weeks denoted for each area provide an idea for the overall time spent working with a given topic throughout the school year.

| Course Outline  | PA Core Standards   | Approx. Pacing | Assessment Options | Suggested Resources   |
|---|---|----------------|--------------------|---|
| <p><i>September</i></p> <p><b>Seasons</b></p> <p><b>Apples</b></p> <p>Observe, compare, and describe the stages of life cycles for plants and/or animals.</p> <p><b>Essential Questions:</b></p> <ul style="list-style-type: none"> <li>• What weather happens during each of the four seasons?</li> <li>• How does an apple grow?</li> </ul> | <p><b>3.1.K.C2</b></p> <p>Describe changes animals and plants undergo throughout the seasons.</p> <hr/> |                |                    | <p>(RTS) <i>Round and Round the Seasons Go</i> by Rozanne Williams (Learning to Read Books)</p> <p><i>Johnny Appleseed /Apple Lifecycle</i> - Teacher choice read-aloud</p> |

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|--|---|----------------|--------------------|--|
| <p><i>October</i></p> <p><b>Leaves</b></p> <p><b>Pumpkins</b></p> <p>Observe, compare, and describe stages of life cycles for plants and/or animals. Describe changes animals and plants undergo throughout the seasons.</p> <p><b>Essential Questions:</b></p> <ul style="list-style-type: none"> <li>• Why do leaves change colors?</li> <li>• How does a pumpkin grow?</li> </ul> | <p><b>3.1.1.C3:</b></p> <p><u>CONSTANCY AND CHANGE</u></p> <p>Describe changes that occur as a result of habitat.</p> <hr/> |                |                    | <p>Teacher choice read-aloud<br/>(RTS) – Teacher choice read-aloud</p> |

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|---|---|----------------|--------------------|--|
| <p><i>November</i></p> <p><b>Animal Mothers and Their Babies</b></p> <p><b>Farms</b></p> <p>Observe and describe how young animals resemble their parents and other animals of the same kind. Observe, compare, and describe stages of life cycles for plants and/or animals.</p> <p><b>Essential Questions:</b></p> <ul style="list-style-type: none"> <li>• How does an animal mother take care of her baby?</li> <li>• How do farmers plant, harvest, and provide food?</li> </ul> | <p><b>3.1.K.B1</b></p> <p>Observe and describe how young animals resemble their parents and other animals of the same kind.</p> <hr/> |                |                    | <p>(RTS) Read-aloud by Dona Rice (<i>Time Life Books</i>)</p> <p><i>Farms Feed the World</i> – Harcourt Series</p> |

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|---|--|----------------|--------------------|---|
| <p><i>December</i></p> <p><b>Hibernation</b></p> <p>Identify the similarities and differences of living and non-living things. Observe, compare, and describe stages of life cycles for plants and/or animals. Observe and describe structures and behaviors of a variety of common animals.</p> <p><b>Essential Questions:</b></p> <ul style="list-style-type: none"> <li>• Where can animals live in the winter?</li> </ul> | <p><b>3.1.K.A9:</b><br/>Distinguish between scientific fact and opinion. Ask questions about objects, organisms, and events.</p> <hr/> <hr/> |                |                    | <p>(RTS) <i>Who Lives Here?</i> by Rozanne Williams (<i>Learning to Read Books</i>)</p> <p><i>Bear Snores On</i> – ELA Big Book</p> |

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| <p><i>January</i></p> <p><b>Weather Storms</b></p> <p>Describe changes that occur as a result of climate. Record daily weather conditions using simple charts and graphs. Identify seasonal changes in the environment. Distinguish between types of precipitation.</p> <p><b>Essential Questions:</b></p> | <p><b>3.2.K.B6:</b></p> <p><u>ENERGY</u></p> <p>Recognize that light from the sun is an important source of energy for living and nonliving systems and some source of energy is needed for all organisms to stay alive and grow.</p> <hr/> |                |                    | <p><i>What Will the Weather Be Like Today?</i> – ELA Big Book</p> <p>(RTS) <i>A Storm Comes Up</i> – ELA Read-Aloud</p> |

| Course Outline  | PA Core Standards  | Approx. Pacing | Assessment Options                            | Suggested Resources  |
|---|--|----------------|---|--|
| <p><i>February</i></p> <p><b>Water</b></p> <p><b>Groundhogs</b></p> <p>Describe the way matter can change. Describe changes animals and plants undergo throughout the seasons. Recognize that everything is made of matter.</p> <p><b>Essential Questions:</b></p> <ul style="list-style-type: none"> <li>• How can water change?</li> <li>• What can groundhogs do?</li> </ul> | <p><b>3.2.K.A5:</b></p> <p><u>CONSTANCY AND CHANGE</u></p> <p>Recognize that everything is made of matter.</p> <hr/> |                | <p>(Can, have, are)<br/>graphic organizer</p> | <p>(RTS) <i>Investigating Water</i> (Delta Science Readers)</p> <p>Teacher choice – read-aloud</p> |

| Course Outline   | PA Core Standards   | Approx. Pacing | Assessment Options | Suggested Resources  |
|--|---|----------------|--------------------|--|
| <p><i>March/April</i></p> <p><b>Plant Cycle</b></p> <p>Describe changes animals and plants undergo throughout the seasons.</p> <p>Recognize that light from the sun is an important source of energy for living and nonliving systems and some source of energy is needed for all organisms to stay alive and grow.</p> <p>Observe, compare, and describe stages of life cycles for plants and/or animals.</p> <p><b>Essential Questions:</b></p> <ul style="list-style-type: none"> <li>• How does a plant grow?</li> </ul> | <p><b>3.2.K.B6:</b></p> <p><u>ENERGY</u></p> <p>Recognize that light from the sun is an important source of energy for living and nonliving systems and some source of energy is needed for all organisms to stay alive and grow.</p> <hr/> |                |                    | <p>(RTS) <i>From Seed to Plant</i> (Delta Science Readers)</p> |

| Course Outline  | PA Core Standards   | Approx. Pacing | Assessment Options | Suggested Resources   |
|---|---|----------------|--------------------|---|
| <p><i>May/June</i></p> <p><b>Rain Forest Animals</b></p> <p><b>Ocean Life</b></p> <p>Describe changes animals and plants undergo throughout the seasons.<br/>Observe and describe structures and behaviors of a variety of common animals.</p> <p><b>Essential Questions:</b></p> <ul style="list-style-type: none"> <li>• What can red-eyed tree frogs do? (Can, have, are) graphic organizers</li> <li>• What kinds of animals live in the rain forest?</li> <li>• What kinds of animals live in oceans?</li> </ul> | <p><b>3.1.K.C2</b></p> <p>Describe changes animals and plants undergo throughout the seasons.</p> <hr/> |                |                    | <p>(RTS) Teacher choice read-aloud</p> <p><i>Red-Eyed Tree Frog</i> – ELA</p> |

