## Spearfish School District Curriculum/ Pacing Guide KINDERGARTEN

Instructional Focus	Focus Summary
Weather Patterns Suggested Time Frame: Oct- Nov.	In this unit, students gather evidence in order to identify daily and seasonal weather patterns. They use those patterns to explain mysteries like why you might lose your jacket during the day or why birds lay their eggs at certain times of the year.
2 Severe Weather Suggested Time Frame: Nov- Dec.	In this unit, students explore storms and severe weather! They obtain information from weather forecasts to prepare for storms and stay safe. They also practice describing the various characteristics of weather (wind, clouds, temperature, and precipitation) in order to make their own predictions about storms.
Pushes and Pulls Suggested Time Frame: Jan-Feb.	In this unit, students are introduced to pushes and pulls and how those affect the motion of objects. Students observe and investigate the effects of what happens when the strength or direction of those pushes and pulls are changed.
4 Sunlight and Warmth Suggested Time Frame: Feb- March	In this unit, students make observations to explore how sunlight warms the Earth's surface. The Sun's energy heats up the pavement, keeps us warm, and can even melt marshmallows. Using what they learn, students think about ways that shade and structures can reduce the warming effect of the Sun.
5 Animal Needs Suggested Time Frame: March- April	In this unit, students use observations to understand the basic needs of animals. Students explore how animals need things to eat and a safe place to live, and also how animals can change their environments to meet those needs.
6 Plant Needs Suggested Time Frame: April- May	In this unit, students use observations to understand the basic needs of plants, such as water and sunlight. They also observe young plants and the changes they undergo as they grow from seed to seedling.

## Spearfish School District Curriculum/ Pacing Guide Grade/

Instructional Focus 1	Strand	Targeted Standards-based Essential Skills & Concepts	Learning Goals / Essential Questions For Instructional Focus	Essential Vocabulary	Resources
Weather Patterns, Severe Weather, Sunlight and Warmth	Physical Science				
Suggested	Life Science				
Time Frame: October- December	Earth and Space Science	K-ESS2-1-Use and share observations of local weather conditions to describe patterns over time.      K-ESS3-2-Engage in argument from evidence for how plants and animals (including humans) can change the environment to meet their needs.  K-PS3-1. Make observations to determine the effect of sunlight on Earth's surface.  K-PS2-2. Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.  K-2-ETS1-1. Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.  K-2-ETS1-3. Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.	<ul> <li>Learning Goals</li> <li>I can identify daily and seasonal weather patterns.</li> <li>I can obtain information from weather forecasts to prepare for storms and stay safe.</li> <li>I can make observations on how sunlight warms the Earth's surface.</li> <li>Essential Questions:</li> <li>How can you get ready for a big storm?</li> <li>Is it hotter or cooler in the morning? What about the afternoon?</li> <li>What is the order of the seasons?</li> </ul>	<ul> <li>weather</li> <li>rain</li> <li>snow</li> <li>wind</li> <li>storm</li> <li>lightning</li> <li>thunder</li> <li>tornado</li> <li>hurricane</li> <li>blizzard</li> <li>observe</li> <li>clouds</li> <li>wind</li> <li>windy</li> <li>experiment</li> <li>temperature</li> <li>hot</li> <li>warm</li> <li>cold</li> <li>dry</li> <li>sun</li> <li>sunny</li> <li>rain</li> <li>rainy</li> </ul>	<ul> <li>Weather</li> <li>Come On, Rain</li> <li>The Stormy Day</li> <li>Weather Forecast</li> <li>Scholastic Magazine</li> <li>Snow Rabbit, Spring Rabbit</li> <li>Ready for Pumpkins</li> <li>Stay Safe in the Sun</li> <li>Cloudy and Sunny</li> <li>What Does Sunlight Do/</li> <li>Keeping Cool in the Summer</li> <li>It's Winter</li> <li>Daily or weekly representation of weather</li> </ul>

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			What kinds of things can a bird use to build a nest?	<ul> <li>mild</li> <li>pattern</li> <li>season</li> <li>winter</li> <li>fall (autumn)</li> <li>summer</li> <li>spring</li> <li>cycle</li> <li>hatch</li> <li>model</li> <li>thin</li> <li>wide</li> <li>short</li> <li>tall</li> <li>small</li> <li>big</li> <li>shade</li> <li>shadow</li> </ul>	• Weather songs (Youtube)

**Assessments**: How do my students demonstrate their understanding and how do I measure their learning?

Formative: Teacher observations, class discussions, student participation, think-pair-share

Summative: Unit assessment

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	Physical Science	K-PS3-1. Make observations to determine the effect of sunlight on Earth's surface.	<u>Learning Goals</u>	<ul><li>push</li><li>pull</li></ul>	<ul> <li>Construction</li> </ul>

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Pushes and Pulls  Suggested Time Frame: Jan- Feb		K-PS2-1. Plan & conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.  K-PS2-2. Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.  K-2-ETS1-1. Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.  K-2-ETS1-2. Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.  K-2-ETS1-3. Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.	<ul> <li>I understand that pushes and pulls are involved in any kind of work.</li> <li>I can explain the difference between a push and a pull</li> <li>I understand that pushes. can change the speed and direction of falling objects.</li> <li>I can tell how a push or pull changes how fast an object moves.</li> <li>I can describe pushes and pulls have different strengths and directions.</li> <li>Essential Questions:</li> <li>What are some machines that spin?</li> <li>What's the difference between a push and a pull?</li> <li>What is something I pull?</li> <li>What is something I push?</li> <li>What happens if two moving objects run into each other?</li> <li>If you invented a machine to do chores, what would it do?</li> </ul>	<ul> <li>machine</li> <li>invent</li> <li>strong</li> <li>weak</li> <li>strength</li> <li>direction</li> <li>experiment</li> <li>model</li> </ul>	<ul> <li>And Everyone Shouted, "Pull!" A First Look at Forces and Motion</li> <li>Duck in the Truck</li> <li>Will you push or pull?</li> <li>Paddle a Canoe</li> <li>Stuck in the Snow</li> <li>Pushing and Pulling</li> <li>Changing Direction</li> <li>Demolition</li> </ul>
	Life Science				
	Earth and Space Science				

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Assessments: How do my students demonstrate their understanding and how do I measure their learning?							
Formative: Teach	Formative: Teacher observations, class discussions, student participation, think-pair-share						

Summative: Unit assessment

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Plant and Animal Needs Suggested	Physical Science				
Time Frame: March- May	Life Science	K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.  K-ESS3-1 Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live.  K-ESS2-2. Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs  K-ESS3-3. Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.	Learning Goals  I can identify what plants and animals need to survive. I can explain different habitats and where animals live. I can explain how animals and plants can adapt to their environments to meet their needs. I can explain the animal and plant life cycle. I can explain how animals keep safe to survive. I can explain the difference between living and nonliving things.  Essential Questions  Where do animals live?	<ul> <li>habitat</li> <li>needs</li> <li>adapt</li> <li>safety</li> <li>survive</li> <li>living</li> <li>nonliving</li> <li>seed</li> <li>soil</li> <li>sprout</li> <li>plant</li> <li>root</li> <li>leaf</li> <li>flower</li> <li>tree</li> <li>food</li> <li>needs</li> <li>experiment</li> <li>sunlight</li> <li>healthy</li> <li>observe</li> <li>forest</li> </ul>	<ul> <li>Where Is Baby Bear?</li> <li>Animal Cubs: Raccoons</li> <li>Living or Nonliving?</li> <li>Plants Are Alive</li> <li>Max Plants A Seed</li> <li>Scholastic Magazine</li> <li>Butterfly Life Cycle (order caterpillars)</li> <li>Chicken Life Cycle (chicken egg incubation)</li> <li>Hands on planting seeds in soil to watch them grow</li> <li>Earth Day presentation</li> </ul>

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			<ul> <li>How do animals change as they go through a life cycle?</li> <li>How do plants and animals change the environment in order to meet their needs?</li> <li>What is needed for plants and animals to survive?</li> </ul>	<ul> <li>nest</li> <li>animal</li> <li>behavior</li> <li>similar</li> <li>different</li> <li>pattern</li> <li>shelter</li> <li>animal</li> <li>beak</li> <li>wing</li> <li>footprint</li> </ul>	
	Earth and Space Science				

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Summative: Unit assessment