

# Dennis-Yarmouth Regional School District

## Science Scope and Sequence

### Grade K

Unit Name	Unit Description / Overview	Stage 1: Desired Results  Enduring Understandings - Students will understand that...	Essential Questions	Standards
<a href="#">Master Unit 1 Plant and Animal Structures</a>	In Kindergarten, students build on early experiences observing the world around them. They learn that all animals and plants need food, water and air to grow and thrive and that the fundamental difference between plants and animals is a plant's ability to make its own food.	All animals need food, water, and air to survive. Animals obtain their food from plants or from other animals. Plants need food, water and light to live and grow. Plants and animals grow and change over time.	What do animals need to survive? What things do plants need to survive? How do plants and animals impact the environment? How do humans impact the environment? What are some positive impacts humans have on the environment?	K-ESS2-2. Construct an argument supported by evidence for how plants and animals (including humans) can change the environment. K-ESS3-3. Communicate solutions to reduce the amount of natural resources an individual uses. K-LS1-1. Observe and communicate that animals (including humans) and plants need food, water, and air to survive. Animals get food from plants or other animals. Plants make their own food and need light to live and grow. K-LS1-2(MA). Recognize that all plants and animals grow and change over time.
<a href="#">Master Unit 2 Earth &amp; Space.</a>	In kindergarten, students build on early experiences observing the world around them as they continue to make observations that are more quantitative in nature and help them identify why some changes occur. Students begin to learn to use these observations as evidence to support a claim though growing language skills. Students begin to identify reasons for changes in some common phenomena, such as local weather conditions to describe patterns over time, or by observing nature to gather evidence that plants and animals can change their environment.	Weather does not stay the same, but changes over time. Weather does have a pattern throughout a year (i.e. cold in the Winter, hot in the Summer). Weather can be predicted humans can change the outside environment.	Yesterday, the weather was _____. Today, the weather is _____. Tomorrow, I think the weather will be _____. When is the weather warmer each year? When is the weather colder each year? What season usually has more rain? What are some examples of severe weather? What characteristics would the playground cover have to have to protect against severe weather? Where would we place an object to make it warm: where it is sunny or where it is shady? What can happen when some solids get too warm?	K-ESS2-1. Use and share quantitative observations of local weather conditions to describe patterns over time. K-ESS3-2. Obtain and use information about weather forecasting to prepare for, and respond to, different types of local weather. K-PS1-1(MA). Investigate and communicate the idea that different kinds of materials can be solid or liquid depending on temperature. K-PS3-1. Make observations to determine that sunlight warms materials on Earths surface. K-PS3-2. Use tools and materials to design and build a model of a structure that will reduce the warming effect of sunlight on an area.

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<a href="#">Master Unit 3 Motion &amp; Stability Forces &amp; Interactions</a>	Students learn that force and motion are all around them! They investigate motion of objects by changing the strength and direction of pushes and pulls.	Pushing hard on an object could make it move farther. Pulling gently on an object could make it move a lesser distance. The same (above) applies to the force of pulling. When objects collide, it could cause them to slow down, stop, and/or move off in a different direction.	What happens when you push or pull an object? Where have you seen a push or a pull? What are some words that describe speed? What are some words we use to describe direction?	K-PS2-1. Compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.
<a href="#">Master Unit 4 Plant and Animal Life Cycles</a>	Students begin a new journey as they explore plant and animal life cycles.	Plants have a life cycle. Animals have a life cycle. Some animals have life cycles that start with eggs. Some animals, like frogs, have unique life cycles. Some young plants and animals look like their parents	What is the difference between a frogs life cycle and a chickens life cycle? How is a plants life cycle like an animals life cycle?	K-LS1-2(MA). Recognize that all plants and animals grow and change over time.