

SCIENCE YEAR AT A GLANCE - KDG.

Unit 1: Launching Science Estimated Time To Complete: 10 Sessions Estimated Window: Aug - Sept	Unit 2: Plants and Animal Estimated Time To Complete: 12 Sessions Estimated Window: Sept - Oct	Unit 3: Pushes and Pulls Estimated Time To Complete: 10 Sessions Estimated Window: Nov - Dec	Unit 4: Weather and Climate Estimated Time To Complete: 15 Sessions Estimated Window: Feb - Mar
<p>Essential Standard(s): K_SC_1 Students will understand and use scientific and engineering practices to conduct investigations and solve problems.</p> <p>Learning Targets:</p> <ul style="list-style-type: none"> · K_SC_1_A Ask questions based on observations to find more information about the natural and/ or designed world. (R) (K-2_ETS1-1, K-ESS3-2) · K_SC_1_B Define a simple problem that can be solved through the development of a new or improved object or tool. (K) (K-ESS3-2, 1-LS1-2, 2-ESS2-3) · K_SC_1_C Conduct an investigation in collaboration with peers using the scientific method. (S) (K-PS2-1, 1-PS4-1, 1-PS4-3, 2-PS1-1) · K_SC_1_D Make direct or indirect observations and/or measurements to collect data which can be used to make comparisons and/or support reasonable explanations. (S) (K-PS2-1, K-PS2-2, K-PS3-1, K-S-ETS1-3) · K_SC_1_E Develop a simple model based on evidence to represent a proposed object or tool. (ex, diagram, drawing, physical replica, diorama, dramatization, or storyboard) (P) (K-2-ETS1-2) · K_SC_1_F Obtain information using grade appropriate texts, informational text features, and other media that will be useful in answering a scientific question. (K) (K-ESS3-2, 1-LS1-2, 2-ESS2-3) · K_SC_1_G Analyze data from tests of an object or tool to determine if it works as intended. (R) (K-2-ETS1-3) 	<p>Essential Standard(s): K_SC_2 Students will investigate how living things interact and survive in their environment.</p> <p>Learning Targets:</p> <ul style="list-style-type: none"> · K_SC_2_A Identify the characteristics of living and non-living things. (K) (K-LS1-1) · K_SC_2_B Identify the basic needs of most animals. (i.e., air, water, food, shelter) (K) (K-LS1-1) · K_SC_2_C Identify the basic needs of most plants. (i.e., air, water, light) (K) (K-LS1-1) · K_SC_2_D Understand how plants and animals change their environment to meet their needs. (K) (K-ESS2-2) · K_SC_2_E Deleted <p style="text-align: center;">K_SC_2_E Use a model to describe how plants, animals, and their surroundings (habitat) make up a system, and they work together to meet their needs. (P) (K-ESS3-1)</p>	<p>Essential Standard(s): K_SC_3 Students will demonstrate an understanding of the interactions of pushes and pulls and explain their effect on objects.</p> <p>Learning Targets:</p> <ul style="list-style-type: none"> · K_SC_3_A Identify forces as a push or a pull. (K) (K-PS2-1, K-PS2-2) · K_SC_3_B Observe and compare objects moving at different speeds and directions due to a push or a pull. (R) (K-PS2-1, K-PS2-2) · K_SC_3_C Compare the change of an object's speed and direction before and after a collision. (R) (K-PS2-2) · K_SC_3_D Recognize that we can change the speed or direction of an object to solve a problem. (K) (K-PS2-2) · K_SC_3_E Analyze data to determine if a designed solution worked as intended to change the speed and direction of an object. (R) (K-PS2-2) 	<p>Essential Standard(s): K_SC_4 Students will examine weather patterns and their effect on living things and the environment.</p> <p>Learning Targets:</p> <ul style="list-style-type: none"> · K_SC_4_A Observe, record, and describe daily weather using measurement tools: <ol style="list-style-type: none"> a. Precipitation (e.g. snow, rain, sleet, and fog) using a rain gauge) b. Wind (ie. light breezes to strong wind) using wind socks c. Cloud Cover using observation d. Temperature (hot, warm, or cold) using thermometers (K) (K-ESS2-1) · K_SC_4_B Identify the most common types of local severe weather. (i.e. thunderstorm, blizzard, tornado, flood, drought) (K) (K-ESS2-2) · K_SC_4_C Understand the purpose of weather forecasting to prepare for, and respond to, problems caused by weather. (K) (K-ESS3-2) · K_SC_4_D Predict how life would be without weather forecasts. (R) (K-ESS3-2) · K_SC_4_E Compare local weather data observed at different times throughout the year and identify patterns. (seasons, morning vs. afternoon) (R) (K-ESS3-1) · K_SC_4_F Describe how the seasons affect the behavior of plants and animals. (including humans) (K) (K-ESS3-1) · K_SC_4_G Based on observations, describe the effects of sunlight on Earth's surface. (e.g. grass, sand) (K) (K-PS3-1) · K_SC_4_H Use tools and materials provided to design and test a structure that will reduce the warming effect of sunlight on Earth's surface. (P) (K-PS3-2)

<p align="center">Unit 5: Human Impact Estimated Time To Complete: 10 Sessions Estimated Window: April - May</p>			
<p>Essential Standard(s): K_SC_5 Students will understand how human behavior affects the world.</p> <p>Learning Targets:</p> <ul style="list-style-type: none"> · K_SC_5_A Identify how humans impact the world around them (land, water, air and/or other living things) to live comfortably. (K) (K-ESS3-3) · K_SC_5_B Communicate and discuss solutions (e.g. reduce, reuse, recycle) that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment using models and/or drawings. (P) (K-ESS3-3) 			