

1st Grade Science Curriculum

	Bundle Focus Guiding Questions	Skills
September-December	<p>Bundle 1: Design from Nature Guiding Questions: How do animals use their external parts to survive?</p> <ul style="list-style-type: none"> ● Why do animals have different types of feet? ● How do plants use their external parts to survive? ● What are some ways animals respond to their environment to survive, grow, and meet their needs? ● What are some ways plants respond to their environment to survive, grow, and meet their needs? 	<ul style="list-style-type: none"> ● Use what they learn about plant and animal structures to design a new tool. ● Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs. ● 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. ● Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.
December-February	<p>Bundle 2: Parents and their Offspring Guiding Questions:</p> <ul style="list-style-type: none"> ● How do parent animals protect their young? ● What behaviors do offspring animals engage in to survive? ● Animals of the same species are similar but not exactly alike. How do we know that young animals look similar to but not exactly like their parents? ● Plants of the same type are similar but not exactly alike. How do we know? 	<ul style="list-style-type: none"> ● Apply their knowledge of trait inheritance and variation with plants and animals and of protective behaviors by writing a segment for a wildlife TV show. ● Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive. ● Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.



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	Module Focus Essential Question	Skills
February- March	<p>Bundle 3: Patterns in the Sky</p> <p>Guiding Questions:</p> <ul style="list-style-type: none"> • What season has the greatest amount of sunlight? • What season has the smallest amount of sunlight? • What objects can we see in the sky during the day? • What objects can we see in the sky at night? 	<ul style="list-style-type: none"> • Apply their knowledge of the patterns of sunrise, sunset, and the motion of the Sun, Moon, and stars by creating a new alarm clock for the Space Museum gift shop. • Make observations at different times of year to relate the amount of daylight to the time of year. • Use observations of the sun, moon, and stars to describe patterns that can be predicted.
March- June	<p>Bundle 4: Communicating with Light and Sound</p> <p>Guiding Questions: What causes something to make sound?</p> <ul style="list-style-type: none"> • What causes something to make sound? • What causes us to be able to see something in the dark? • In what ways can the path of light be changed? 	<ul style="list-style-type: none"> • Design a device that uses light and sound as a new form of communication. • Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate. • 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. • Make observations to construct an evidence-based account that objects can be seen only when illuminated. • Plan and conduct investigations to determine the effect of placing objects made with different materials in the path of a beam of light. • Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.* • 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. • Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.