Term 1 - No Benchmarks

Term 2

Strand 1.1: SEASONS AND SPACE PATTERNS Seasonal patterns of motion of the Sun, Moon, and stars can be observed, described, and predicted. These patterns may vary depending on the region, location, or time of year

Standard 1.1.1 Obtain, evaluate, and communicate information about the movement of the Sun, Moon, and stars to describe predictable <u>patterns</u>. Examples of patterns could include how the Sun and Moon appear to rise in one part of the sky, move across the sky, and set; or how stars, other than the Sun, are visible at night but not during the day. (ESS1.A)

I can observe, describe and communicate the predictable patterns of how the sun, moon and stars move.

Strand 1.1: SEASONS AND SPACE PATTERNS Seasonal patterns of motion of the Sun, Moon, and stars can be observed, described, and predicted. These patterns may vary depending on the region, location, or time of year

Standard 1.1.2 Obtain, evaluate, and communicate information about the <u>patterns</u> observed at different times of the year to relate the amount of daylight to the time of year. Emphasize the variation in daylight patterns at different times of the day and different times of the year. Examples could include varying locations and regions throughout the state, country, and world. (ESS1.B)

I can observe and describe daylight patterns at different times of the day and year

Strand 1.1: SEASONS AND SPACE PATTERNS Seasonal patterns of motion of the Sun, Moon, and stars can be observed, described, and predicted. These patterns may vary depending on the region, location, or time of year

Standard 1.1.3 Design a device that measures the varying <u>patterns</u> of daylight. Define the problem by asking questions and gathering information, convey designs through sketches, drawings, or physical models, and compare and test designs. Examples could include sundials for telling the time or tracking the movement of shadows throughout the day. (ESS1.B, ETS1.A, ETS1.B, ETS1.C)

I can design a device that measures the patterns of daylight.

Term 3

Strand 1.3: LIGHT AND SOUND Sound can make matter vibrate, and vibrating matter can make sound. Objects can only be seen when light is available to illuminate them. Some objects give off their own light. Some materials allow light to pass through them, others allow only some light to pass through them, and still others block light and create a dark shadow on the surface beyond them where the light cannot reach. Mirrors can be used to redirect light. People use a variety of devices that may include sound and light to communicate over long distances.

Standard 1.3.1 Plan and carry out an investigation to show the <u>cause and effect</u> relationship between sound and vibrating matter. Emphasize that vibrating matter can make sound and that sound can make matter vibrate. (PS4.A)

I can investigate the cause and effect between sound and vibrations.

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Standard 1.3.2 Use a model to show the <u>effect</u> of light on objects. Emphasize that objects can be seen when light is available to illuminate them or if they give off their own light. (PS4.B)

I can use a model to show the effect that light has on objects.

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Standard 1.3.3 Plan and carry out an investigation to determine the <u>effect</u> of materials in the path of a beam of light. Emphasize that light can travel through some materials, can be reflected off some materials, and some materials block light causing shadows. Examples of materials could include clear plastic, wax paper, cardboard, or a mirror. (PS4.B)

I can investigate and describe the effect of different materials in the path of a beam of light.

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Standard 1.3.4 Design a device in which the <u>structure</u> of the device uses light or sound to solve the problem of communicating over a distance. Define the problem by asking questions and gathering information, convey designs through sketches, drawings, or physical models, and compare and test designs. Examples of devices could include a light source to send signals, paper-cup-and-string telephones, or a pattern of drum beats. (PS4.C, ETS1.A, ETS1.B, ETS1.C)

I can design a device in which the structure uses light or sound to solve the problem of communicating over a distance.

Term 4

Strand 1.2: THE NEEDS OF LIVING THINGS AND THEIR OFFSPRING Living things (plants and animals, including humans) depend on their surroundings to get what they need, including food, water, shelter, and a favorable temperature. Plants and animals have external features that allow them to survive in a variety of environments. Young plants and animals are similar but not exactly like their parents. In many kinds of animals, parents and offspring engage in behaviors that help the offspring to survive.

Standard 1.2.1 Plan and carry out an investigation to determine the effect of sunlight and water on plant growth. Emphasize investigations that test one variable at a time. (LS1.C)

I can investigate and explain the cause and effect of sunlight and water on plants.

Strand 1.2: THE NEEDS OF LIVING THINGS AND THEIR OFFSPRING Living things (plants and animals, including humans) depend on their surroundings to get what they need, including food, water, shelter, and a favorable temperature. Plants and animals have external features that allow them to survive in a variety of environments. Young plants and animals are similar but not exactly like their parents. In many kinds of animals, parents and offspring engage in behaviors that help the offspring to survive.

Standard 1.2.2 Construct an explanation by observing <u>patterns</u> of external features of living things that survive in different locations. Emphasize how plants and nonhuman animals, found in specific surroundings, share similar physical characteristics. Examples could include that plants living in dry areas are more likely to have thick outer coatings that hold in water, animals living in cold locations have longer and thicker fur, or most desert animals are awake at night. (LS1.A, LS1.D)

I can observe and explain patterns of physical features of plants and animals that survive in different environments.

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Standard 1.2.3 Obtain, evaluate, and communicate information about the <u>patterns</u> of plants and nonhuman animals that are alike, but not exactly like, their parents. An example could include that most carrots are orange and shaped like a cone but may be different sizes or have differing tastes. (LS3.A, LS3.B)

I can observe and describe similarities and differences between parent and baby plants and animals.

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Standard 1.2.4 Construct an explanation of the <u>patterns</u> in the behaviors of parents and offspring which help offspring to survive. Examples of behavioral patterns could include the signals that offspring make such as crying, chirping, and other vocalizations or the responses of the parents such as feeding, comforting, and protecting the offspring. (LS1.B)

I can observe and explain patterns in the behaviors of parents and babies which help the babies survive.

Scope & Sequence

Term 1	No Benchmarks
Term 2	Strand 1
Term 3	Strand 3
Term 4	Strand 2

ALL ESSENTIAL STANDARDS ARE HIGHLIGHTED IN YELLOW