Big Idea	Standard	Breakdown
1. The Practice of Science	SC.K.N.1.1 Collaborate with a partner to collect information. (Low)	• Know that a ***team*** is two to four **partners** working together to collect information. • Participate in a team. • Perform a role in a team. • Share materials/supplies with your partners. • Take turns with your partners.
	SC.K.N.1.2 Make observations of the natural world and know that they are descriptors collected using the five senses. (Moderate)	• Know that **observations** are something you notice with your ***senses***. • See, smell, feel, touch and/or taste *(*with permission)* different objects or substances. • Name which sensory organ(s) are used to make each type of observation. *(Record them in a table)*
	SC.K.N.1.3 Keep records as appropriate -- such as pictorial records -- of investigations conducted. (Moderate)	• Use a science notebook to record ***qualitative*** and ***quantitative*** observations *(data)*. • Record ***data*** in tables. • Match structures to function, causes to effects, terms to meanings, and ***claims*** to ***evidence***.
	SC.K.N.1.4 Observe and create a visual representation of an object which includes its major features. (High)	• **Draw** and objects and label its parts *(add measurements and a title)*. • Label a **diagram** with the terms from a word bank.
	SC.K.N.1.5 Recognize that learning can come from careful observation. (Moderate)	• Know that scientist learn about the world by making observations and measurements *(using tools)*. • Use scientific tools *(lab equipment)* to make ***accurate*** and ***precise*** *(empirical)* observations. • Record ***measurements*** with ***units***.
5. Earth in Space and Time	SC.K.E.5.1 Explore the Law of Gravity by investigating how objects are pulled toward the ground unless something holds them up. (Moderate)	• Know that **gravity** is a ***force*** that pulls objects toward each other. • Investigate what happens to objects dropped from a place above the ground. Record which way they fall. • Observe what happens to objects thrown up into the sky. Record which way they fall.
	SC.K.E.5.2 Recognize the repeating pattern of day and night. (Low)	• Know that **time** is a measure of how long it takes an object to move in a certain distance. • Know that a **day** is the time it takes a planet ***(Earth)*** to make one turn ***(rotate)*** on it axis. *(One Earth day is about 24 hours)*. • Track the hours of day-light and night *(dark)* over one *month*. Record how the hours changes (more/less). • Track and record the time of day that the sun rises and sets over a month. Describe how the times change. • Know that a **pattern** is the way something repeats itself over a period of time.
	SC.K.E.5.3 Recognize that the sun can only be seen in the daytime. (Low)	• Know that the **sun** is a ***star*** *(that makes its own light and heat)*. • Observe what space objects can be seen in the day time sky. *(Usually sun and sometimes the moon)*.

	SC.K.E.5.4 Observe that sometimes the moon can be seen at night and sometimes during the day. (Moderate)	• Know that the **moon** is a small, round object in space that circles *(revolves)* around the Earth. • Record the dates *(days)* that the moon is visible in the night sky over a month. • Record the dates the moon is also visible in the day time sky over the same month.
5. Earth in Space and Time (continued)	SC.K.E.5.5. Observe that things can be big and things can be small as seen from Earth. (High)	• Know that **space** *(outer space)* is the area in all directions beyond the Earth. • Know other objects are also visible in the night sky *(stars and planets)*. • Know that a **planet** is a large object in space that circles *(revolves)* around the sun. • Know that **Earth** is a planet *(third from the sun in our solar system)*; the planet we live on. • Compare which objects in outer space look different *(some bigger others smaller, some different colors, some twinkle)* as viewed from the Earth.
	SC.K.E.5.6 Observe that some objects are far away and some are nearby as seen from Earth. (High)	• Know that objects in space are not always as large or small as they appear. • Investigate why some objects look bigger than others objects as seen from the same place.
8. Properties of Matter	SC.K.P.8.1 Sort objects by observable properties, such as size, shape, color, temperature (hot or cold), weight (heavy or light) and texture. (Moderate)	• Know that a **property** is a characteristic *(quality)* of matter. • Know that a ***physical property*** is a characteristic of matter that can be observed. • Identify the physical properties of a variety of different objects/substances *(solids, liquids, gases)*. • Know that a ***thermometer*** is a toll used to measure temperature. • Use a *thermometer* to measure how hot or cold two objects are compared to each other. Record the degree and unit of measure. • Know that **temperature** is a measure of how hot or cold something is. • Use a balance scale to measure how much one object weighs compared to another. Measure and record the mass and/or weight of the objects. • Sort *(classify)* objects with similar *physical properties* into groups.
9. Changes in Matter	SC.K.P.9.1 Recognize that the shape of materials such as paper and clay can be changed by cutting, tearing, crumpling, smashing, or rolling. (Low)	• Know that a ***physical change*** is a change in a property of matter. • Investigate different ways to physically change the shape of an object *(substance)*. • Record the ways you successfully physically changed the objects.
10. Forms of Energy	SC.K.P.10.1 Observe that things that make sound vibrate. (Low)	• Know that ***vibrations*** are a back and forth motion that causes sound. • Know that **sound** is a form of energy. • Investigate different ways musical instruments make sounds. • Observe the ways different instrument vibrate to make sound. Record how each one vibrates in a table. • Compare loud and soft sounds *(volume or intensity)*. • Compare high and low sounds *(pitch)*.

12. Motion of Objects	SC.K.P.12.1 Investigate that things move in different ways, such as fast, slow, etc. (High)	• Know that when an object **moves** it changes its position. • Investigate different ways objects *move*. • Record what caused the objects motion, a push or a pull.
13. Forces and Changes	SC.K.P.13.1 Observe that a push or a pull can change the way an object is moving. (Low)	• Know that a ***force*** is a push or pull. • Identify which *force* causes an object to move.
14. Organization and Development of Living Things	SC.K.L.14.1 Recognize the five senses and related body parts.	• Know that your **senses** are what you use to make observations; the five senses are seeing, hearing, smelling, tasting, and touching. • Investigate and record the parts of your body that smells different odors; feels different textures; hears different sounds; see different colors and shapes; or tastes different flavors *(with permission)*. • Know that your five ***sense organs*** are eyes, ears, nose, mouth, and hands. • Match each sense organ with its function. Record it in a structure and function table.
	SC.K.L.14.2 Recognize that some books and other media portray animals and plants with characteristics and behaviors they do not have in real life.	• Know that a **characteristic** is a quality that describes a living thing or an object. • Know that a **behavior** is something an organism does to get the things it needs to live. • Know that an ***organism*** is a living thing (plant or animal. • Site passages in a text that describe organisms doing things they cannot do in real life. • Collect pictures or cartoons that show organisms doing things they do not do in real life.
	SC.K.L.14.3 Observe plants and animals, describe how they are alike and how they are different in the way they look and in the things they do. (Moderate)	• Know that a ***structure*** of a living thing is a part of their body. • List the structures plants and/or animals have in common. • Know that the ***function*** is what each structure does to help it survive *(stay alive to reproduce offspring)*. • Record the function of each structure. • Sort *(group)* organisms by similar structures into groups. • Describe and record the attributes *(structures and behaviors)* of each group. • Understand that a living things form usually determines its function and that a change in a structure affects the things they do.

