

## Kindergarten– Science

### **CONTENT: Earth and Space Sciences**

<b>Skills Based on Academic Content Standards</b>
Observe that the sun can be seen only in the daytime, but the moon can be seen sometimes at night and sometimes during the day.
Explore that animals and plants cause changes to their surroundings.
Explore that sometimes change is too fast to see and sometimes change is too slow to see.
Observe and describe day-to-day weather changes (e.g., today is hot, yesterday we had rain).
Observe and describe seasonal changes in weather.

### **CONTENT: Life Sciences**

<b>Skills Based on Academic Content Standards</b>
Explore differences between living and non-living things (e.g., plant-rock).
Discover that stories (e.g., cartoons, movies, comics) sometimes give plants and animals characteristics they really do not have (e.g., talking flowers).
Describe how plants and animals usually resemble their parents.
Investigate variations that exist among individuals of the same kind of plant or animal.
Investigate observable features of plants and animals that help them live in different kinds of places.
Investigate the habitats of many different kinds of local plants and animals and some of the ways in which animals depend on plants and each other in our community.

### **CONTENT: Physical Sciences**

<b>Skills Based on Academic Content Standards</b>
Demonstrate that objects are made of parts (e.g., toys, chairs).
Examine and describe objects according to the materials that make up the object (e.g., wood, metal, plastic and cloth).
Describe and sort objects by one or more properties (e.g., size, color and shape).
Explore that things can be made to move in many different ways such as straight, zigzag, up and down, round and round, back and forth, or fast and slow.
Investigate ways to change how something is moving (e.g., push, pull).

## **CONTENT: Science and Technology**

<b>Skills Based on Academic Content Standards</b>
Explore that objects can be sorted as "natural" or "man-made".
Explore that some materials can be used over and over again (e.g., plastic or glass containers, cardboard boxes and tubes).
Explore that each kind of tool has an intended use, which can be helpful or harmful (e.g., scissors can be used to cut paper but they can also hurt you).

## **CONTENT: Scientific Inquiry**

<b>Skills Based on Academic Content Standards</b>
Ask "what if" questions.
Explore and pursue student-generated "what if" questions.
Use appropriate safety procedures when completing scientific investigations.
Use the five senses to make observations about the natural world.
Draw pictures that correctly portray features of the item being described.
Recognize that numbers can be used to count a collection of things.
Use appropriate tools and simple equipment/instruments to safely gather scientific data (e.g., magnifiers and other appropriate tools).
Measure the lengths of objects using non-standard methods of measurement (e.g., teddy bear counters and pennies).
Make pictographs and use them to describe observations and draw conclusions.
Make new observations when people give different descriptions for the same thing.

## **CONTENT: Scientific Ways of Knowing**

<b>Skills Based on Academic Content Standards</b>
Recognize that scientific investigations involve asking open-ended questions. (How? What if?)
Recognize that people are more likely to accept your ideas if you can give good reasons for them.
Interact with living things and the environment in ways that promote respect.
Demonstrate ways science is practiced by people everyday (children and adults).