

Domain 4: Science Concepts & Exploration

Standard: Children demonstrate a basic awareness of and use scientific concepts.

Children learn about science concepts through the exploration of both their indoor and outdoor environment. They use all of their five senses to take in new information and actively learn about their world.

As newborns, children use observation to make sense of their surroundings. They track objects with their eyes, enjoy looking at faces, and notice high-contrast patterns. When they begin to grasp objects, children explore object properties. They may mouth, shake, drop, bang, or manipulate the objects in order to learn about them.

They soon discover that they enjoy an action they have performed upon the object and take great delight in repeating it over and over. For example, they drop objects onto the ground and hear a loud bang. They repeat this to continue hearing the banging noise. In this example, children are learning about cause and effect and trial and error.

By 24 months, children are active scientists, trying to discover as many new things as possible. They are interested and curious about living things, and begin to ask simple questions about nature. They enjoy spending time outside, and pick up objects to observe, such as leaves, pebbles, or flowers. They are also capable of identifying characteristics of living things they are familiar with. For example, they may share that their cat “meows.” Children are also engaging in the beginning processes of classification as they can identify similar properties among objects and people. Children begin to apply past experiences to new ones, and begin to predict outcomes of certain actions.

The great outdoors!

Children learn through all of their senses, and what better place to engage all of those senses than the outdoors. There are many opportunities for children to see different animals, colors, and people. Children can experience different textures as they explore