

DOMAIN 4: GENERAL KNOWLEDGE**SUB-DOMAIN: SCIENCE****SCIENTIFIC INQUIRY****GOAL 42: CHILDREN OBSERVE, DESCRIBE, AND COLLECT INFORMATION BY EXPLORING THE WORLD AROUND THEM.**

Age Range	Developmental Growth	Child Indicators	Caregiver Strategies
<p>36 to 60 Months</p>	<p>Calls attention to, describes, discusses, and explains similarities and differences among objects or events.</p>	<ul style="list-style-type: none"> ▪ Shows interest and curiosity in exploring, investigating, and using words to describe living and nonliving things. ▪ Asks “why” and “how” questions about objects and events. ▪ Participates in simple cooking experiences, including stirring, pouring, kneading, tasting, smelling, and talking about changes in the appearance and form of the food. ▪ Labels and describes sensory exploration of materials, objects, and natural phenomena (e.g. textures, visual imagery, temperature, auditory, or tastes). ▪ Makes comparisons and calls attention to details; and with adult assistance, explores the ways in which things are alike and different (e.g. notices how shells are the same or different; notices objects that float or sink; listens to and mimics different sounds of animals). ▪ Notices, describes, and predicts changes in the environment (e.g. dark clouds mean possible rain). ▪ Observes, compares, classifies, measures, and communicates observations of events and objects. ▪ Explores earth science, physical science, and life science through observations and experimentation with concrete objects. ▪ Uses simple tools (magnifiers, lenses, droppers) for exploration and investigation. ▪ Predicts the outcome of an investigation based on observation, evidence, or experience. 	<ul style="list-style-type: none"> ▪ Provide opportunities to explore, describe, collect, classify, and document materials, objects, and natural phenomena using various senses (e.g. experiment to collect items or experiences that are hot and cold, loud and soft, or rough and smooth). ▪ Provide opportunities to make, categorize, and label nature collages. ▪ Provide frequent cooking experiences with measuring sensory activities (squeezing, tasting) and describing and predicting changes. ▪ Provide opportunities to observe and explore different physical characteristics of living and nonliving things using investigative tools (magnifiers, droppers), with assistance. ▪ Provide opportunities to examine and create nature collections such as rocks, shells, and insects. ▪ Provide opportunities to group, order, and classify collections of rocks, shells, and toy animals. ▪ Play “I Spy” to describe living and nonliving items in the immediate surroundings. ▪ Provide opportunities for child to select items and place them in a sensory bag for others to explore, describe, and identify. Be sure to have the children chart their findings. ▪ Discuss which food items come from plants during snack time. ▪ Provide cooking experiences and talk about textures, tastes, smells, and changes that occur during experience. ▪ Provide a variety of fruits and vegetables for exploration to find similarities and differences, or to compare attributes of different seeds. Plant a garden and make a

		<ul style="list-style-type: none"> ▪ Respects living things (e.g. watering plants or trying to avoid stepping on ant hills). ▪ Explores answers to questions and forms new questions or conclusions. 	<p>month's long project of exploring, comparing and contrasting plants from soil to seeds to new plants to growing plant to harvesting to cooking and eating.</p> <ul style="list-style-type: none"> ▪ Provide child with bubble solution and a variety of wands and household items (ladles with holes, spatulas, funnels, strawberry baskets, straws), and encourage them to describe and predict the bubbles each item makes. ▪ Use lighting and different objects and describe their different shadows. ▪ Provide opportunities to compare and describe the similarities and differences of living and nonliving things with photos or illustrations in books. ▪ Have a museum table for bringing living and non-living items for display and discussion. ▪ Provide digital cameras, paper, and art materials for documenting child's observations (e.g. representations of the sequence of the emerging of a caterpillar; rubbings of shells, or a series of drawings of an amaryllis blooming).
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