

# △ SCIENCE KNOWLEDGE & SKILLS

**Science Knowledge & Skills** refers to the emerging ability to gather information about the natural and physical world and organize that information into knowledge and theories. Young children are often called natural scientists. Their inclination to be curious, explore, ask questions, and develop their own theories about how the world works makes science an important domain for enhancing learning and school readiness. Science learning during the early childhood years encourages children to discover the world around them and refine their understanding of it. It provides opportunities for rich vocabulary learning and collaboration with peers. It fosters a sense of curiosity and motivation to learn. In the domain of Science Knowledge & Skills, programs need to ensure that children who are dual language learners can demonstrate their abilities, skills, and knowledge in any language, including their home language.

**KEY**   △ = Domain   ► = Domain Element   • = Example

The domain elements for Science Knowledge & Skills for 3 to 5 year olds are:

## ► SCIENTIFIC SKILLS & METHOD

The skills to observe and collect information and use it to ask questions, predict, explain, and draw conclusions.

- Uses senses and tools, including technology, to gather information, investigate materials, and observe processes and relationships.
- Observes and discusses common properties, differences, and comparisons among objects.
- Participates in simple investigations to form hypotheses, gather observations, draw conclusions, and form generalizations.
- Collects, describes, and records information through discussions, drawings, maps, and charts.
- Describes and discusses predictions, explanations, and generalizations based on past experience.

## ► CONCEPTUAL KNOWLEDGE OF THE NATURAL & PHYSICAL WORLD

The acquisition of concepts and facts related to the natural and physical world and the understanding of naturally-occurring relationships.

- Observes, describes, and discusses living things and natural processes.
- Observes, describes, and discusses properties of materials and transformation of substances.