

Science: 3 Years

Skills & Processes

1 Students will demonstrate the thinking and acting inherent in the practice of science. 1

- 1 Use scientific thinking as well as his senses to discover the world around him, and make comparisons between objects (e.g., ask questions about everything he sees, put the modeling clay in water to see what happens). 1.1
 - 2 Seek information through observation, exploration and descriptive investigations with simple science tools (e.g., ask lots of “why” questions, use tools such as magnifying glass, balance scale and measuring cups for investigation, guess that a nut is inside an acorn, and confirm that prediction by breaking, with assistance, the acorn to find out). 1.2
 - 3 Use more advanced problem solving skills, testing his understanding and ideas in real situations (e.g., get a toy broom and use the handle to get a ball out from under a shelf where it has rolled). 1.3
 - 4 Show interest in quantity, measuring and number relationships (e.g., fill a balance scale with beads, making one side go down, then the other). 1.4
 - 5 Show interest in concepts such as matching and sorting according to a single criteria (e.g., help to put away the utensils, matching the large spoons with the other large spoons). 1.5
 - 6 Use prior knowledge and imagination to think through what he wants to play (e.g., use the blocks as garages and houses that the cars and trucks drive to, use the Unifix Cubes with several friends to try to make a rod that reaches across the room). 1.6
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Earth/Space

2 Students will use scientific skills and processes to explain the chemical and physical interactions (i.e., natural forces and cycles, transfer of energy) of the environment, Earth, and the universe that occur over time. 2

- 1 Begin to recognize his own physical and family characteristics and those of others (e.g., count how many boys are in the group he is playing with, go to the table when the teacher says that everyone who has brown hair may go). 2.1
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Chemistry

3 Students will use scientific skills and processes to explain the composition, structure, and interactions of matter in order to support the predictability of structure and energy transformations. 3

- 1 Use scientific thinking as well as his senses to discover the world around him, and make comparisons between objects (e.g., watch the fish and tell that he likes the biggest one best). 3.1
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Physics

4 Students will use scientific skills and processes to explain the interactions of matter and energy and the energy transformations that occur. **4**

Environmental Science

5 Students will use scientific skills and processes to explain the interactions of environmental factors (living and non-living) and analyze their impact from a local to a global perspective. **5**