

Curriculum Guide for Parents

Kindergarten Science

STANDARD 1: ANALYSIS, INQUIRY AND DESIGN

Students will use mathematical analysis, scientific inquiry, and engineering design, as appropriate, to pose questions, seek answers, and develop solutions.

Scientific Inquiry:

The Scientific Method is the process scientists use to go from asking a question to finding an answer. Students should:

- ask questions through observations
- make predictions
- follow procedures
- observe experiments
- draw conclusions using graphs, pictures, written and/or verbal responses

For a more detailed list of process skills refer to pages 10 and 15 of the New York State Elementary Science Core Curriculum at <http://www.emsc.nysed.gov/ciai/mst/pub/elecoresci.pdf>.

STANDARD 4: LIVING ENVIRONMENT

Life Sciences - Plants and Animals

- Knows that animals and plants sometimes cause changes in their surroundings
- Observe animals have different structures that serve different functions in growth, survival and reproduction
- Observe plants have different structures that serve different functions in growth, survival and reproduction
- Observe plants and animals closely resemble their parents and other individuals in their species
- Plants and animals can transfer specific traits to their offspring when they reproduce
- Observe that there is variation among individuals within a population
- Animals require air, water and food (essential nutrients) in order to live and thrive
- Plants require air, water, essential nutrients and light in order to live and thrive
- Nonliving things do not live and thrive
- Nonliving things can be human created or normally occurring
- Living things are found almost everywhere in the world; different types of plants and animals live in different places
- All animals depend on plants. Some animals eat other animals

STANDARD 4: LIVING ENVIRONMENT

Health and Nutrition

- Humans need a variety of healthy foods, exercise and rest in order to grow and maintain good health
- Good health habits include hand washing and personal cleanliness, avoiding harmful substances, eating a balanced diet, engaging in regular exercise

Human decisions and activities have had a profound impact on the physical and living environments.

- Humans depend on their natural and constructed environments
- Over time humans have changed their environment by cultivating crops and raising animals, creating shelter, using energy, manufacturing goods, developing means of transportation, changing populations, and carrying out other activities
- Humans, as individuals or communities, change environments in ways that can be either helpful or harmful for themselves and other organisms

STANDARD 4: PHYSICAL SETTING

Earth Science - Weather

- Observe that weather can change from day to day and through the seasons
- Understands that the sun's energy provides the light and heat that warms the air and water
- Weather can be described and measured by temperature, form and amount of precipitation and general sky conditions (sunny, cloudy, partly cloudy, stormy, fair)

Physical Science - Motion

- The position of an object can be described by locating it relative to another object or the background (i.e., on top of, next to, over, under...)
- The position or direction of motion of an object can be changed by pushing or pulling