



Elementary Science

The ISK Science program is designed to engage students' natural curiosity. Teachers begin by laying a foundation of knowledge, and then students' own interests and curiosity help guide the learning. Many units integrate social studies and science concepts as well as library skills, art, music and technology.

Science units are designed to provide opportunities for students to learn through inquiry and hands-on activities. Units are centered around five general strands:

1. *Nature of Science and Scientific Inquiry (integrated into all units)*
2. *Life Sciences*
3. *Physical Sciences*
4. *Earth and Beyond*
5. *Environmental Sciences (integrated into all units)*



Pre-Kinder

1. NATURE OF SCIENCE

Standard 1.1: Understand the nature of scientific inquiry (*Understand and use the scientific method*)

- 1.1.1 Use the senses to make observations about living things, nonliving objects, and event
- 1.1.2 Compare, sort and classify according to attributes

Standard 1.2: Communicate scientific ideas and activities clearly

- 1.2.1 Ask questions about observations

Standard 1.3: Investigate using appropriate tools and instruments to conduct scientific activities

- 1.3.1 Use simple tools to gather information

Standard 1.4: Understand the nature of scientific knowledge and enterprise (*Understand why science is important*)

- 1.4.1 Learn to see themselves as scientists

2. LIFE SCIENCES

Standard 2.1: Understand biological evolution and diversity (scientific comparisons)

- 2.1.1 Introduce simple classification of grouping living things

Standard 2.2: Understand the structure and function of cells and organisms

- 2.2.1 Know that living things and nonliving objects are different
- 2.2.2 Know that living things go through a process of growth and change

Standard 2.3: Understand the relationships among organisms and their environment

- 2.3.1 Understand that living things have similar needs

3. PHYSICAL SCIENCES

Standard 3.1: Understand the structure and properties of matter

- 3.1.1 Know vocabulary used to describe some observable properties (e.g., color, shape, size) of objects
- 3.1.2 Sort objects based on observable properties
- 3.1.3 Know that the physical properties of things can change

Standard 3.3: Understand forces and motion

- 3.3.1 Know the effects of forces (e.g., wind, gravity) in nature
- 3.3.2 Know that objects can be moved in space in a number of ways (e.g. pushing, pulling, sinking and floating)

4. EARTH AND BEYOND

Standard 4.1: Understand the composition, structure and features of the geosphere, hydrosphere and atmosphere (*Earth, Water and Air*)

- 4.1.1 Begin to understand vocabulary (e.g. rainy, windy, sunny) for different types of weather
- 4.1.2 Know that weather conditions change over time
- 4.1.3 Investigate some different materials and their properties (e.g., rock, water, soil) of Earth

Standard 4.2: Understand the composition and structure of the universe and the Earth's place in it

- 4.2.1 Use vocabulary (e.g. clouds, sun, moon) to describe major features of the sky

5. ENVIRONMENTAL SCIENCES

Standard 5.1: Understand atmospheric processes and cycles

- 5.1.1 Understand how energy is used in daily lives



International School of Kenya

Empowering students to create solutions for tomorrow's challenges

Pre-Kinder

Standard 4: Develop an understanding and commitment to environmental responsibility

PASSION | CREATIVITY | AMBITION

Tel +254-20-209-1308/9 or +254-733-639-363
communications@isk.ac.ke | www.isk.ac.ke
PO Box 14103 Nairobi 00800, Kenya

