

Science Curriculum - Grade 6

GRADE SIX ESSENTIAL SKILLS

- Content Skills- Students will develop an understanding of the human body. Students will develop an understanding of how tools, observation, and technology are used to forecast weather.
- Process Skills/Scientific Method –Children will use the scientific method in our inquiry-based activities in all grade levels and content areas in the science curriculum. Students will work in small teams and form own conclusion, make hypothesis, design experiments to test, seek information for comparing past and present science ideas and theories, determine the relationship between evidence and explanation, comprehend alternative explanations and procedures, and communicate procedures and explanations
- Scientific Technology & Tools – Students will use appropriate tools, technology, and techniques to gather, analyze, interpret, and share data. (microscopes, computers, thermometers, barometers, rulers, magnifying glasses, rain gauges (cm units), graduated cylinders, compile data on a computer, use technology to share data, and safety goggles)
- Science Safety-Students will follow safety instructions, directions, and use appropriate safety equipment.

LIFE SCIENCE CONTENT

Human Body - STC

- Students will identify parts and functions of a basic animal cell
- Using models or diagrams, students will identify and describe the major functions and basic structures of the following systems:
 - Digestive
 - Respiratory System
 - Circulatory
 - Musculoskeletal
- Students will identify and describe the function of the major organs in the human body (i.e., lungs, heart, brain, and stomach)
- Students will demonstrate that the systems of the human body are interconnected and work together as one system using models, diagramming, or other visuals

EARTH/SPACE SCIENCE CONTENT

Weather and Climate

- Students will use weather instruments (commercial or home made instruments—thermometers, barometers, simple wind gauges, weather vanes and rain gauges.)
- Students will gather and organize weather data using instruments and computer technology (temperature, air pressure, precipitation, wind direction and speed)
- Students will observe, describe, and record weather conditions such as clouds, temperature, air pressure, and precipitation
- Students will compare and contrast the various types of clouds, categorize them as cirrus, cumulus and stratus, and use them for short-term weather predictions
- Students will explain the weather trends that relate to seasonal change
- Using the internet, students will locate weather sites to collect weather data
- Explain weather conditions to large and small-scale weather systems, e.g.. Highs, lows, and fronts

- Explain weather-related phenomena such as thunderstorms, tornadoes, hurricanes, or drought
- Students will explain in their own words, with or without visuals, the relationship between climate and weather in regards to biomes
- Students will draw and label the different parts of the atmosphere (layers)
- Students will explain how human activity affects the atmosphere and how the weather activity of the atmosphere affects humans
- Students will demonstrate with a visual the basic water cycle - precipitation, evaporation and condensation.

PHYSICAL SCIENCE None