



1st Semester Parent Syllabus - Science Grade 4
2019-2020

Semester 1 = Physical Science

Semester 2 = Life Science, Earth and Space Science

Sem.	"I can" Statements	Vocabulary
1	<p>P.4.6A Students will demonstrate an understanding of the common sources and uses of heat and electric energy and the materials used to transfer heat and electricity.</p> <p><u>P.4.6A.1</u> I can explain what every means. I can describe why burning, friction, and electricity serve as a source of energy.</p> <p>Students investigate electric currents and circuits, the pathways through which electricity flows. They work with a variety fo components, D cells, light bulbs, motors, switches, and wires, and explore conductors and insulators. Students explore series and parallel circuits and compare the functioning of the components in each circuit. Students formulate and justify their predictions based on their observations of electricity transferring energy to produce light and motion.</p> <p>P.4.6A.2 Students will plan and conduct scientific investigations to classify different materials as either an insulator or conductor of electricity.</p> <p><u>P.4.6A.2</u> I can tell the difference between an insulator and a conductor. I can understand how a circuit works.</p> <p>Students investigate to answer the Focus Questions: What is needed to light a bulb? What is needed to make a complete pathway for current flow in a circuit? How can you light two bulbs brightly with one D cell battery? Which design is better for manufacturing long strings of lights; series or parallel?</p>	<p><u>P.4.6A.1</u> energy, heat energy, burning, friction, electricity, convert, energy source, properties, circuit, component, conductor, insulator, terminal, transfer</p> <p><u>P.4.6A.2</u> classify, insulators, conductors, circuits, construct, components, series, parallel, attract, force, gravity, friction, interact, magnet, magnetic field, repel, core</p>

Sem.
2

L.4.1. Students will demonstrate an understanding of the organization, functions, and interconnections of the major human body systems.

L.4.1.1 I can compare the general functions of specific technology as it relates to the functions of a body system.
I can identify the organs that work together to create organ systems.

Students will answer questions such as: Can you name the 6 major organs and describe their functions, What is a machine or piece of technology which generally functions as support for a human body system, etc. Videos such as "A Life Changed by Robotic Legs" allow real-life understandings of how technology helps us everyday.

E.4.9C. Students will demonstrate an understanding of how natural processes and human activities affect the features of Earth's landforms and oceans.

E.4.9C.1 I can interpret data to describe and predict how natural processes such as weathering, erosion, deposition, earthquakes, tsunamis, hurricanes, and storms affect Earth's surface.

Students will gain a conceptual understanding that Earth's oceans and landforms can be affected in various ways by natural processes in one or more of earth's spheres.

E.4.9C.2 I can describe different types of weather.
I can name and accurately describe different types of landforms that border, or are surrounded by, water.

Students will develop and use models of natural processes to explain the effect of the movement of water on the ocean shore zones.

E.4.10. Students will demonstrate an understanding of the various sources of energy used for human needs along with their effectiveness and possible impacts.

E.4.10.1 I can organize data to compare energy and pollution output of traditional and nonrenewable resources (coal, crude oil, wood)

Students will gain a conceptual understanding of energy and fuels that are derived from natural sources and how human use of these materials affects the environment in multiple ways.

*The above standards and vocabulary are priority in Grade 4.

L.4.1.1 human body system, Circulatory, Digestive, Muscular, Nervous, Respiratory, organs, brain, heart, liver, kidneys, lungs, disease, infectious, noninfectious, function

E.4.9C.1 landforms, Earth spheres, natural hazards, conservation, weathering, erosion, deposition, tsunami, hurricanes, tornados, thunderstorms

E.4.9C.2 beach, barrier islands, estuaries, inlets, marshes, bays, lagoons, fjords, sounds

E.4.10.1 data, energy, pollution, output, nonrenewable, crude oil

