

1st Semester Parent Syllabus - Science Grade 3 Semester 1: Physical Science

Semester 2: Life Science, Earth Science

Sem.	"I can" Statements	Vocabulary
1	P.3.6. Students will demonstrate an understanding of magnets and the effects of pushes, pulls, and friction on the motion of objects.	
	P.3.6.1 I can compare and contrast the effects of different strengths and directions of forces on the motion of an object (gravity, polarity, attraction, repulsion, or strength).	P.3.6.1 attract, balanced, construct, force, gravity, interac, magnetic force, predict, properties, repel, unbalanced, variable
	Students explore the forces of magnetism and gravity using magnets. Through their investigations, students find that both magnetism and gravity can pull, and magnetism can sometimes push as well. Both forces can make things move even when not in direct contact with another object. Students use their investigation data to predict how far the magnetic field extends.	
	P.3.5. Students will demonstrate an understanding of the physical properties of matter to explain why matter can change states between a solid, liquid, or gas dependent upon the addition or removal of heat.	
	P.3.5.1 I can plan and conduct scientific investigations to determine how changes of heat change matter from one state to another. I can plan and conduct investigation that particles speed up or slow down with addition or removal of heat.	P.3.5.1 chemical reaction, chemical interaction, conservation of matter, dissolve, liquid, mass, matter, mixture, physical reaction, physical interaction, properties, solid, solution
	Students build and extend grade two experiences with matter by making mixtures of two materials. They determine the mass of the materials prior to mixing and after mixing. In one mixture, salt dissolves, resulting in a solution equal to the starting masses of the water and salt. They mix vinegar and baking soda and observe a bubbling reaction. Students determine that the mass of the ending mixtures is less than the mass of the original materials, which challenges students to infer the carbon dioxide gas, which escaped, has mass.	
	*The above standards and vocabulary are priority in Grade 3.	

Sem. 2

- L3.2. Students will demonstrate an understanding that through reproduction, the survival and physical features of plants and animals are inherited traits from parent organisms but can also be influenced by the environment.
- L.3.2.2 I can describe and provide examples of plant and animal offspring from a single parent organism (bamboo, fern, starfish) as being an exact replica with identical traits as the parent organism.

I can obtain and communicate data to provide evidence that plants and animals have traits inherited from both parent organisms and that variations of these traits exist in groups of similar organisms (flower colors in pea plants, fur color and pattern in animal offspring).

- L3.2.5 I can research to justify the concept that traits can be influenced by the environment (stunted growth in normally tall plants due to insufficient water, changes in an arctic foxes fur color due to light and/or temperature, or flamingo plumage).
- E.3.7B Students will demonstrate an understanding of the composition of Earth and the processes which change Earth's landforms.
- <u>E.3.7.B.1</u> I can develop and use models to describe the characteristics of Earth's continental landforms and classify landforms as volcanoes, mountains, valleys, canyons, plains, and islands.
- E.3.10 Students will demonstrate an understanding that all materials, energy, and fuels that humans use are derived from natural sources.
- <u>E.3.10.1</u> I can identify some of Earth's resources that are used in everyday life such as water, wind, soil, forests, oil, natural gas, and minerals and classify as renewable or nonrenewable.
- *The above standards and vocabulary are priority in Grade 3.

<u>L3.2.2</u> compete, disperse, function, modify, inherit, nutrient

L3.2.5 adaptation, environment, habitat, predator, species, stable system, sustain, sustainable, trait

- E.3.7.B.1 absorb, gravity, natural material, repel, slope, contract, expand, less dense, mass, more dense, state, volume, condensation, evaporation, meteorology, precipitation, water cycle, drought, floodplain, natural hazard, wetland
- E.3.10.1. natural resource, non renewable, renewable resource, retain, water retention