

NCPS Science Unit Map - Grade 3

Parent Curriculum Guide

These scientific and engineering practices are developed in each unit throughout the year:

- Asking questions (for science) and defining problems (for engineering)
- Developing and using models
- Planning and carrying out investigations
- Analyzing and interpreting data
- Using mathematics and computational thinking
- Constructing explanations (for science) and designing solutions (for engineering)
- Engaging in argument from evidence
- Obtaining, evaluating, and communicating information

Science Topic	Student Learning Expectations
Motion and Stability	<p>Students will determine the effects of balanced and unbalanced forces on the motion of an object.</p> <p>Through class discussion and explorations students will</p> <ul style="list-style-type: none"> ● plan and conduct investigations to provide evidence of the effects of balanced and unbalanced forces. ● provide evidence that a pattern can be used to predict future motion. ● define a simple design problem that can be solved by applying scientific idea about magnets.
Life Interactions	<p>Students will learn that many characteristics of organisms are inherited from their parents and other characteristics result from individuals' interactions with the environment.</p> <p>Through class discussion and explorations students will</p> <ul style="list-style-type: none"> ● construct an argument that some animals form groups that help members survive ● Design an investigation to determine the effect of an environmental change on a population
Biological Evolution	<p>Students will develop an understanding that when the environment changes some organisms survive and reproduce, some move to new locations, some move into the transformed environment, and some die.</p> <p>Through class discussion and explorations students will</p> <ul style="list-style-type: none"> ● examine how fossils are created by building their own model. ● analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived.