

Movement

Content Area: **Science**
Course(s):
Time Period: **Undefined**
Length: **All Year**
Status: **Published**

Unit Overview

Essential Questions

How do things move?

What do things move?

How can I make things go faster/slower?

How does size/shape/weight effect movement?

What is a ramp?

What is a pulley?

How do wheels help?

Content

Movement of objects

Skills

Observing

Predicting

Describing

Comparing

Sorting

Vocabulary

Matching

Creating

Assessments

Teacher observation and question

Student response

Lessons/Learning Scenarios

1. exploring things that roll
2. explore things that slide
3. sink vs float activities
4. balance scale activities
5. building and exploring ramps (how far/fast something will go)
6. building and exploring pulleys (simple pulley: 3M hook, string, and small bucket)
7. observe the flag and classroom shades being raised/lowered – pulley
8. tossing a ball then a scarf and compare
9. balancing block structures
10. blowing different objects across the floor/table

Standards

SCI.PK.5.1.1	Display curiosity about science objects, materials, activities, and longer-term investigations in progress (e.g., ask who, what, when, where, why, and how questions during sensory explorations, experimentation, and focused inquiry).
SCI.PK.5.1.2	Observe, question, predict, and investigate materials, objects, and phenomena during classroom activities indoors and outdoors and during any longer-term investigations in progress. Seek answers to questions and test predictions using simple experiments or research media (e.g., cracking a nut to look inside; putting a toy car in water to determine whether it sinks).
SCI.PK.5.1.3	Use basic science terms (e.g., observe, predict, experiment) and topic-related science

vocabulary (e.g., words related to living things [fur, fins, feathers, beak, bark, trunk, stem]; weather terms [breezy, mild, cloudy, hurricane, shower, temperature]; vocabulary related to simple machines [wheel, pulley, lever, screw, inclined plane]; words for states of matter [solid, liquid]; names of basic tools [hammer, screwdriver, awl, binoculars, stethoscope, magnifier]).

- SCI.PK.5.1.4 Communicate with other children and adults to share observations, pursue questions, make predictions, and/or conclusions.
- SCI.PK.5.1.5 Represent observations and work through drawing, recording data, and “writing” (e.g., drawing and “writing” on observation clipboards, making rubbings, charting the growth of plants).
- SCI.PK.5.2.1 Observe, manipulate, sort, and describe objects and materials (e.g., water, sand, clay, paint, glue, various types of blocks, collections of objects, simple household items that can be taken apart, or objects made of wood, metal, or cloth) in the classroom and outdoor environment based on size, shape, color, texture, and weight.
- SCI.PK.5.2.4 Investigate how and why things move (e.g., slide block, balance structures, push structures over, use ramps to explore how far and how fast different objects move or roll).
- SCI.PK.5.5.1 Identify and use basic tools and technology to extend exploration in conjunction with science investigations (e.g., writing, drawing, and painting utensils, scissors, staplers, magnifiers, balance scales, ramps, pulleys, hammers, screwdrivers, sieves, tubing, binoculars, whisks, measuring cups, appropriate computer software and website information, video and audio recordings, digital cameras, tape recorders).

Resources
