

Boochland County Public Schools

Grade 5 Science

Marking Period 1

SOL 5.1 Scientific Investigations

classify	thermometer	results	scientific method
estimate	meter stick	conclusion	hypothesis
length	balance	materials	X axis
mass	graduated cylinder	procedure	Y axis
volume	responding variable	predication	
data	manipulated variable	inferences	

SOL 5.4 Matter

atom	molecule	element	compound
------	----------	---------	----------

Ask your child: 1) to identify the appropriate tool for measuring objects around the house, and 2) to design and conduct experiments using the steps of the Scientific Method during Winter and Spring breaks.

Marking Period 2

SOL 5.1 Scientific Investigations (see details from Marking Period 1)

SOL 5.4 Matter

mass	volume	solid	liquid
gas	mixture	solution	

SOL 5.2 Sound

sound energy	vibrations	sound waves	frequency
wavelength	amplification	pitch	amplitude
decibel			

SOL 5.3 Light

white light	visible spectrum	light energy	transparent
translucent	opaque	reflection	refraction

Ask your child 1) to explain how matter, molecules, elements, and compounds are different, and 2) to explain how sound travels through different mediums (solids, liquids, and gases), and 3) to describe what happens when light is reflected and refracted.

Marking Period 3

SOL 5.1 Scientific Investigations (see details from Marking Period 1)

SOL 5.5 Living Systems

invertebrates	vertebrates	vascular	nonvascular
kingdoms	monerans	protists	fungi
plant	animal	animal cell	plant cell

SOL 5.7 Earth and Rocks

metamorphic rock	igneous rock	sedimentary rock	magma
erosion	weathering	crust	mantle
outer core	inner core	fossil	fault
plate tectonics	convergent boundary	divergent boundary	sliding boundary
continental drift			

Ask your child 1) to state examples of each of the five kingdoms 2) to explain, describe, and find an example of the three types of rocks, and 3) draw the structure of the Earth's surface and interior.

Marking Period 4

SOL 5.1 Scientific Investigations (see details from Marking Period 1)

SOL 5.6 Oceans

continental shelf	continental slop	continental rise	abyssal plain
mid-ocean ridge	ocean trench	salinity	current
density	phytoplankton	depth	wave

All 4th Grade Science SOLs will also be reviewed during Marking Period 4 in preparation for the Science SOL test.

Ask your child 1) to describe the features of the ocean floor, and 2) to explain the difference between a wave and a current.

Grade 5 Science

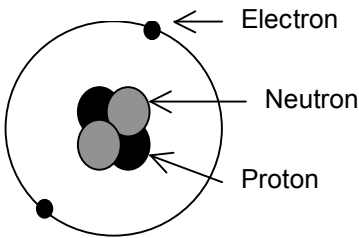
Steps of the Scientific Method

1. Identify the problem
2. State hypothesis.
3. Conduct experiments.
4. Collect data and make observations.
5. State conclusions.

Light
reflection=bouncing
refraction=bending

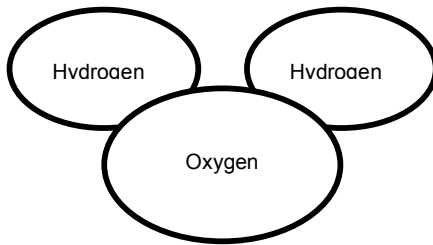
Sound
higher pitch=higher frequency
lower pitch=lower frequency

The Atom



Water (H₂O) Molecule and Compound

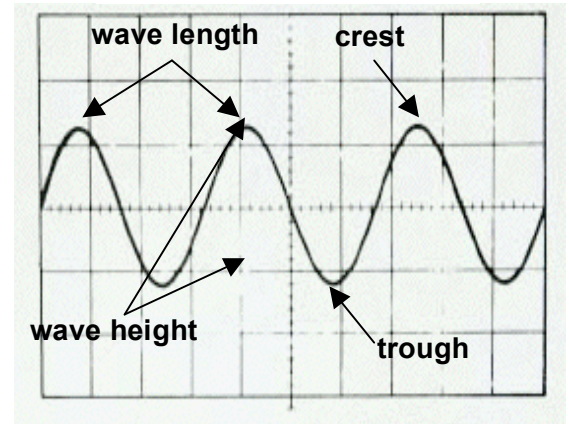
Made of two Hydrogen Atoms and one Oxygen Atom



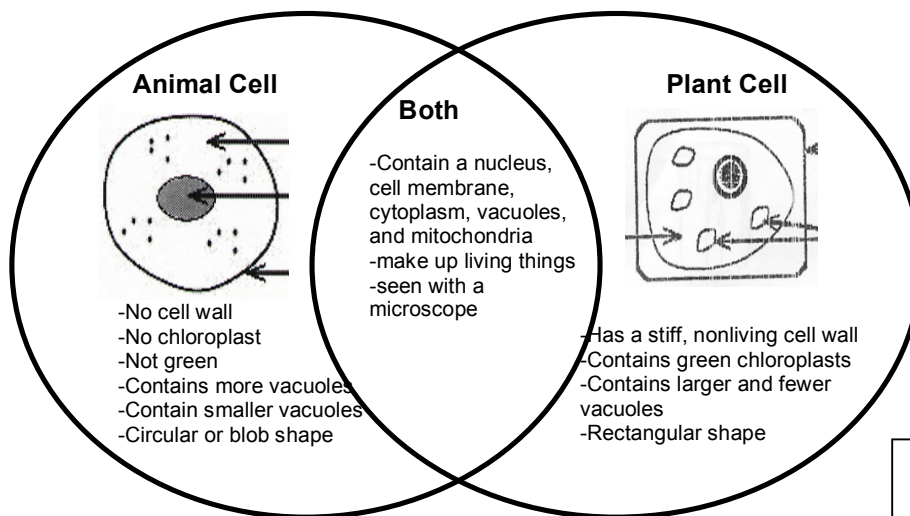
Types of Rocks	Appearance	Examples
Sedimentary	<ul style="list-style-type: none"> grainy straight layers may contain fossils 	sandstone limestone
Metamorphic	<ul style="list-style-type: none"> curved layers formed from heat and pressure 	marble slate
Igneous	<ul style="list-style-type: none"> may contain crystals may be light in mass may contain air holes 	pumice granite

Tool	Name	Measures	Units
	Balance	Mass	Grams Kilograms
	Meter Stick Metric Ruler	Length	Millimeters Centimeters Meters Kilometers
	Graduated Cylinder	Volume	Milliliters Liters
	Thermometer	Temperature	degrees Celsius degrees Fahrenheit

Diagram of a Wave



Part of the Ocean Floor	Description
Continental Shelf	shallow part where the ocean meets the land
Continental Slope	steep drop off at the edge of the continental land mass
Continental Rise	area connecting the continental slope to the abyssal plain
Abyssal Plain	deep, flat area
Mid-Ocean Ridge	underwater chain of mountains
Oceanic Trench	deepest part that resembles an underwater valley



Five Kingdoms & Examples

Moneran - bacteria
Protist - amoeba
Fungus - mushroom
Plant - tulip or moss
Animal - lion or jellyfish