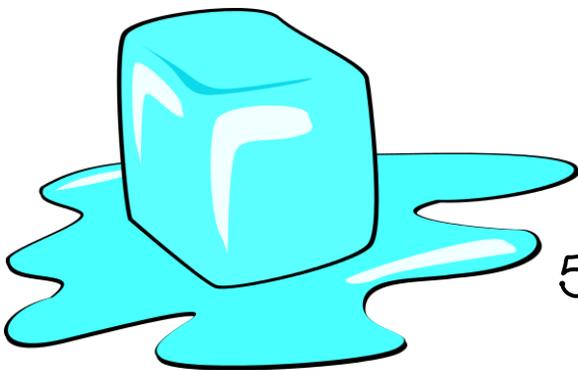


Chemical & Physical Change



5th Grade Science Standard 1

1. I can describe that matter is neither created nor destroyed even though it may undergo change.

- 1.a I can compare the total weight of an object to the weight of its individual parts after being disassembled.
- 1.b I can compare the weight of a specified quantity of matter before and after it undergoes melting or freezing.
- 1.c I can investigate the results of the combined weights of a liquid and a solid after the solid has been dissolved and then recovered from the liquid.
- 1.d I can investigate chemical reactions in which the total weight of the materials before and after reaction is the

2. I can evaluate evidence that indicates a physical change has occurred.

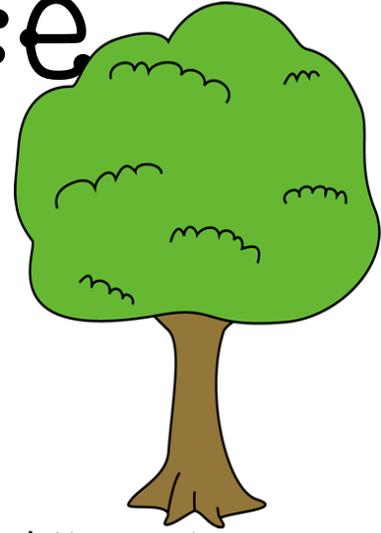
- 2.a I can identify the physical properties of matter
- 2.b I can compare changes in substances that indicate a physical change has occurred.
- 2.c I can describe the appearance of a substance before and after a physical change.

3. I can investigate evidence for changes in matter that occur during a chemical reaction.

- 3.a I can identify observable evidence of a chemical reaction.
- 3.b I can explain why the measured weight of a remaining product is less than is reactants when a gas is produced.
- 3.c I can cite examples of chemical reactions in daily life.
- 3.d I can compare a physical change to a chemical change.
- 3.e I can hypothesize how changing one of the materials in a chemical reaction will change the results.

Earth's Surface

5th Grade Science Standard 2



1. I can describe how weathering & erosion change Earth's surface.

- 1.a I can identify the objects, processes, or forces that weather and erode Earth's surface (e.g. valleys, canyons)
- 1.b I can describe how geological features are changed through erosion.
- 1.c I can explain the relationship between time and specific geological changes.

2. I can explain how volcanoes, earthquakes, and uplift affect Earth's surface.

- 2.a I can identify specific geological features created by volcanoes, earthquakes, and uplift.
- 2.b I can give examples of different landforms that are formed by volcanoes, earthquakes, and uplift (e.g. mountains, valleys, lakes, canyons)
- 2.c I can describe how volcanoes, earthquakes, and uplift change landforms.
- 2.d I can cite examples of how technology is used to predict volcanoes and earthquakes.

3. I can relate the building up and breaking down of Earth's surface over time to the various physical land features.

- 3.a I can explain how layers of exposed rock (e.g. Grand canyon) are the result of natural processes acting over long periods of time.
- 3.b I can describe the role of deposition in the processes that change Earth's surface.
- 3.c I can use a time line to identify the sequence and time required for building and breaking down of geologic features on Earth.
- 3.d I can describe and justify how the surface of Earth would appear if there were no mountain uplift, weathering, or erosion.

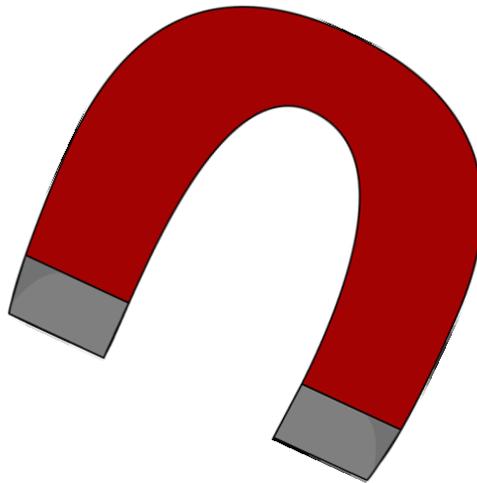
Magnetism

5th Grade Science

Standard 3

I. I can investigate and compare the behavior of magnetism using magnets.

- 1.a I can compare various types of magnets and their abilities to push or pull iron objects they are not touching.
- 1.b I can investigate how magnets will both attract and repel other magnets.
- 1.c I can compare permanent magnets and electromagnets
- 1.d I can research and report the use of magnets that is supported by sound scientific principles.



2. I can describe how the magnetic field of Earth and a magnet are similar.

- 2.a I can compare the magnetic fields of various types of magnets (e.g. bar magnet, disk magnet, horseshoe magnet)
- 2.b I can compare Earth's magnetic field to the magnetic field of a magnet.
- 2.c I can construct a compass and explain how it works.
- 2.d I can investigate the effects of magnets on the needle of a compass and compare this to the effects of Earth's magnetic field on the needle of a compass.

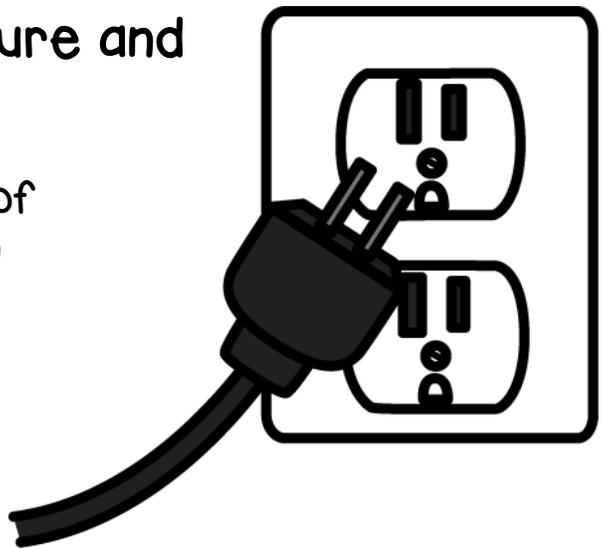
Electricity

5th Grade Science

Standard 4

1. I can describe the behavior of static electricity as observed in nature and everyday occurrences.

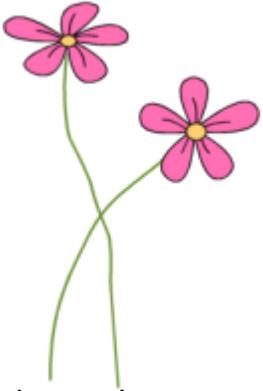
- 1.a I can list several occurrences of static electricity that happen in everyday life.
- 1.b I can describe the relationship between static electricity and lightning.
- 1.c I can describe the behavior of objects charged with static electricity in attracting or repelling without touching.
- 1.d I can compare the amount of static charge produced by rubbing various materials together.



2. I can analyze the behavior of current electricity.

- 2.a I can draw and label the components of a complete electrical circuit that includes switches and loads.
- 2.b I can predict the effect of changing one or more of the components in an electric circuit.
- 2.c I can generalize the properties of materials that carry the flow of electricity using data by testing different materials.
- 2.d I can investigate materials that prevent the flow of electricity.
- 2.e I can make a working model of a complete circuit using a power source, switch, bell, or light, and a conductor for a pathway.

Traits in Organisms



5th Grade Science

Standard 5

1. I can use supporting evidence to show that traits are transferred from a parent organism.

- 1.a □ I can make a chart and collect data identifying various traits among a given population.
- 1.b □ I can identify similar physical traits of a parent organism and its offspring. For example: trees and saplings.
- 1.c □ I can compare various examples of offspring that do not initially resemble the parent organism but mature to become similar to the parent organism. For example: tadpoles & frogs
- 1.d □ I can contrast inherited traits with traits and behaviors that are not inherited but may be learned or induced by environmental factors.

2. I can describe how some characteristics could give a species a survival advantage in a particular environment.

- 2.a □ I can compare the traits of similar species for physical abilities, instinctual behaviors, and specialized body structures that increase the survival of one species in a specific environment over another species.
- 2.b □ I can identify that some environments give one species a survival advantage over another. For example: warm water favors fish such as carp while cold water favors fish such as trout.
- 2.c □ I can describe how a particular physical attribute may provide an advantage for survival in one environment but not in another.
- 2.d □ I can research a specific plant or animal and report how specific physical attributes provide an advantage for Survival.

