

Goochland County Public Schools

Grade 1 Science

Marking Period 1

- 1.1** *See the reverse side for an explanation of this SOL.
- 1.5** Investigate and understand that animals, including humans, have basic needs and certain distinguishing characteristics. Key concepts include
- a) basic needs including adequate air, food, water, shelter, and space (habitat);
 - b) animals, including humans, have many different physical characteristics; and
 - c) animals can be classified according to a variety of characteristics.

Marking Period 2

- 1.6** Investigate and understand the basic relationships between the sun and Earth. Key concepts include
- a) the sun is the source of heat and light that warms the land, air, and water;
 - b) the sun's relative position in the morning is east and in the late afternoon is west.
- 1.7** Investigate and understand weather and seasonal changes. Key concepts
- a) changes in temperature, light, and precipitation affect plants and animals, including humans;
 - b) there are relationships between daily and seasonal changes; and
 - c) changes in temperature, light, and precipitation can be observed and recorded over time.

Marking Period 3

- 1.2** Investigate and understand that moving objects exhibit different kinds of motion. Key concepts include
- a) objects may have straight, circular, and back-and-forth motions;
 - b) objects may vibrate and produce sound;
 - c) pushes or pulls can change the movement of an object; and
- 1.3** Investigate and understand how different common materials interact with water. Key concepts include
- a) some liquids will separate when mixed with water, but others will not;
 - b) some solids will dissolve in water, but others will not; and
 - c) some substances will dissolve more readily in hot water than in cold water.

Marking Period 4

- 1.4** Investigate and understand that plants have basic life needs and functional parts and can be classified according to certain characteristics. Key concepts include
- a) plants need nutrients, air, water, light, and a place to grow;
 - b) basic parts of plants; and
 - c) plants can be classified based on a variety of characteristics.
- 1.8** Investigate and understand that natural resources are limited. Key concepts include
- a) identification of natural resources;
 - b) factors that affect air and water quality; and
 - c) recycling, reusing, and reducing consumption of natural resources.

For more information about the Virginia Standards of Learning, please visit
<http://www.doe.virginia.gov/VDOE/Superintendent/Sols/home.shtml>

Key Vocabulary and Definitions:

Plant: A living thing that makes its own food and does not move from place to place.

Seed: The part of the plant that can grow into a new plant.

Fruit: The part of the plant that holds the seeds.

Blossom: The part of the plant that is often colorful and makes seeds.

Roots: The part of the plant that grows down in the soil and pulls water and nutrients from the soil.

Stem: The part of the plant that helps support the plant and helps bring water and nutrients to the rest of the plant.

Edible: Something that you can eat.

Non-edible: Something that you cannot eat.

Rotation: One full spin of an object around an axis.

Rotation of the Earth causes day and night.

Revolve: To cause to go around in an orbit; to move in a curved path round a center.

Force: A push or pull.

Motion: An action; movement.

Vibration: A very fast back and forth motion; produces a sound.

Dissolve: To melt; to liquefy.

Hibernate: To be in a sleeplike state over the winter (ex. bears, bats, snakes, bees).

Migrate: To move from one climate or habitat to another in response to seasonal changes (i.e. whales, birds, butterflies).

Precipitation: The different forms of water that form from the moisture in the air (rain, snow, hail, and sleet).

Natural Resources: Products found in and on Earth (water, plants, trees, animals, metal ore, natural gases and oil, sand).

Conserve: To use very little of something; to save it for later use.

Recycle: To process used material so that it can be used again.

Reduce: To make something smaller in size or amount.

Experiment: A fair test designed to answer a question.

Prediction: A forecast about what may happen in the future.

Inference: A conclusion based on evidence about events that have already occurred.

SOL 1.1 - Throughout the year your child will conduct investigations in which:

- the senses are used to observe differences in physical properties;
- observations are made from multiple positions to achieve a variety of perspectives and are repeated to ensure accuracy;
- objects or events are classified and arranged according to characteristics or properties;
- simple tools are used to enhance observations;
- length, mass, volume, and temperature are measured using nonstandard units;
- inferences are made and conclusions are drawn about familiar objects and events;
- a question is developed from one or more observations;
- predictions are made based on patterns of observations;
- observations and data are recorded, analyzed, and communicated orally and with simple graphs, pictures, written statements, and numbers; and
- simple investigations and experiments are conducted to answer questions.

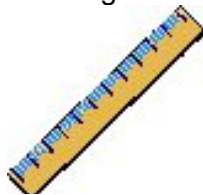
Parent Resources:

*Visit www.portaportal.com for links to great web sites related to these SOLs. Enter **reslab** in the Guest Access box.

MEASUREMENT TOOLS For SCIENTIFIC EXPERIMENTATION SOL 1.1

Ruler:

Used to measure length.



Thermometer:

Used to find the temperature.



Scale:

Used to measure weight.



Magnifying Glass:

Makes objects look larger.

