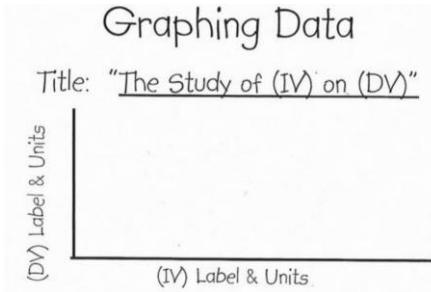


Inquiry Review:

Mean is another name for averaging.

Range is the difference between the lowest and greatest values in a set of numbers.

Graphing:



Dependent Variable: the data collected from changing the IV.

Independent Variable: the one factor changed in the experiment.

Constants: all of the factors that will remain the same throughout the experiment.

Control: The group used for comparison. It is either without the independent variable or is the most normal situation.

Length is the distance from one point to another and is measured to the nearest millimeter with a meter stick or metric ruler.

Temperature is the degree or intensity of heat present in a substance or object and is measured with a thermometer in degrees Celsius.

Time can be measured with a watch, clock, stop watch, timer, etc. to the nearest second.

Volume is the amount of space that a substance or object occupies and is measured to the nearest milliliter using a graduated cylinder.

Force is a push or a pull measured to the nearest Newton.

Mass is a measure of how much matter is in an object and is measured to the nearest gram using a triple beam balance.

Qualitative observation: (quality) usually made with our senses: color, shape, feel, taste, sound.

Quantitative observation: (quantity) How many. Will always have a number and be based on an exact measurement.

Astronomy Review:

A **moon** is a smaller rocky object that revolves around a planet or larger object prior to its revolution around the sun.

Is the distance between a planet and the sun related to the length of a year, the length of a day, or both? Year: the closer to the sun, the shorter the revolution, the shorter the year. Rotation has nothing to do with distance.

Meteor: in space

Meteoroid: In Earth's atmosphere

Meteorite: Hits Earth's Surface

Where is the **asteroid belt** located? Between Mars and Jupiter

Where are most comets found? **Kuiper Belt** and **Oort Cloud**

Name the planets in order: **Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune**

Pluto is an example of what? **Dwarf Planet**

A **light year** is the distance light travels in a year.

An **AU** (Astronomical Unit) equals the average distance between the Earth and the Sun.

We would use an AU to measure the distance between planets in the solar system. We would use a light year to measure the distance between stars.

The phase of the moon you see depends on how much of the sunlit side of the moon faces Earth.

For a **solar eclipse** to occur, the moon must be directly between the Earth and the Sun.

A **lunar eclipse** can occur during a full moon.

Because the moon rotates once for each revolution around Earth, you never see the far side of the moon from Earth.

The different shapes of the moon seen from the Earth are called **phases**.

Every 29.5 Earth days is equal to one day on the moon, or one year on the moon.

One revolution of Earth around the sun takes about **365.25 days**.

An **equinox** occurs when neither end of Earth's axis is tilted toward or away from the sun.

The counter clockwise movement of Earth around the sun is called: **revolution**. The counterclockwise movement of Earth on its axis is called: **rotation**.

What causes Earth's seasons? **The tilt of Earth's axis** as it revolves around the sun. **23.5 degrees**

Why is it warmer near the equator than the poles? More direct sunlight at the equator.

What are the two factors that need to be combined to keep Earth and the moon in their orbits? **Gravity and Inertia**

The tendency of a moving object to continue moving in a straight line or a stationary object to remain in place is called: **inertia**.

The strength of the force of gravity depends on the **masses** of the objects and the **distance** between them.

A push or a pull is a **force**.

The tendency of an object to resist change in motion is also known as **Newton's 1st Law of motion**.

Rock Cycle Review:

A place where two plates slip past each other, moving in opposite directions: **Transform boundary**

A place where two plates come together: **Convergent Boundary** (creates: trenches, mountains, volcanoes)

A place where two plates move away from each other: **Divergent Boundary** (creates rift valleys)

A break in Earth's crust where masses of rock slip past each other is called a **fault**.

All plate boundary movements can create earthquakes.

Igneous Rock is rock that forms from the cooling of magma below the surface or lava at the surface.

Most **metamorphic** rock forms underground. Metamorphic rock almost always forms under conditions of tremendous **heat** and **pressure**.

Fossils can be found in **sedimentary rock**.

All rocks start out as **igneous rock**.

Molten rock above the Earth's surface is called **lava**. Molten rock below the Earth's surface is called **magma**.

Weather and Climate Review:

Water Cycle - The continual movement of water among Earth's atmosphere, oceans, and land surface through evaporation, condensation, and precipitation.

Evaporation - The process by which water molecules in liquid water escape into the air as water vapor.

Humidity - The amount of water vapor in a given volume of air.

Condensation - The process by which molecules of water vapor in the air become liquid water.

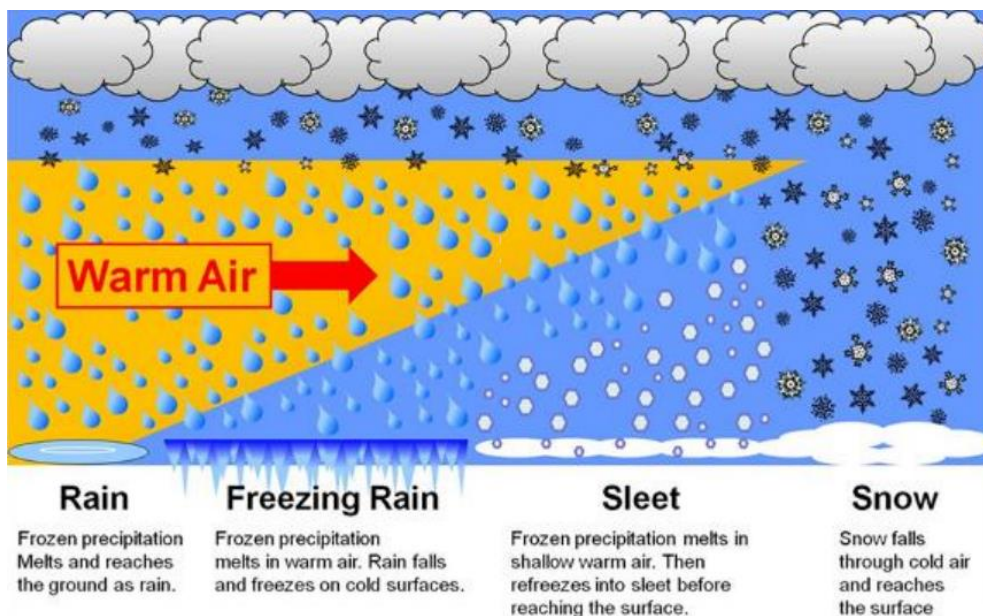
Dew Point - The temperature at which condensation begins.

Precipitation - Any form of water that falls from clouds and reaches Earth's surface.

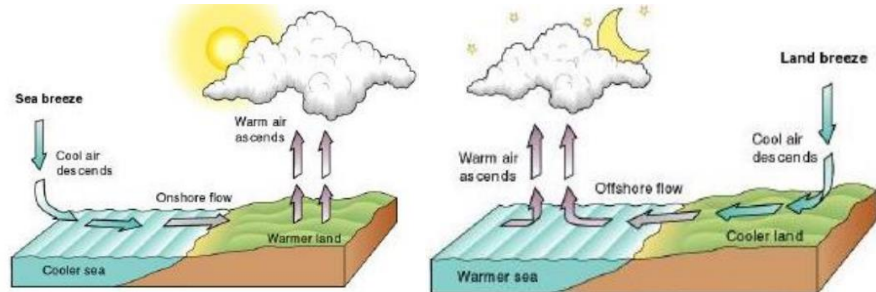
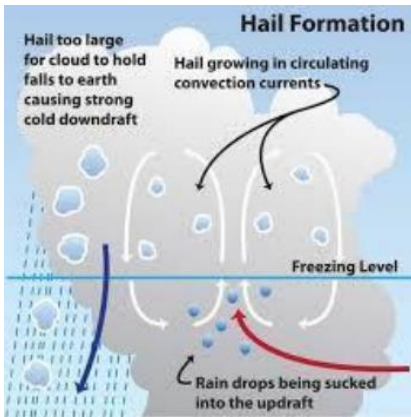
Rain Gauge - An instrument used to measure precipitation.

Surface Runoff- Any water on the surface of the Earth.

Ground Water- water below the surface of the Earth.



Fog – clouds that form on the ground.



Sea Breeze: During the day the land is warm and the sea is cool. The breeze comes in from the sea.

Land Breeze: At night the land is cool and the sea is warm. The breeze moves out towards the sea from the land.

Wind is the horizontal movement of air from an area of high pressure to an area of lower pressure.

Cold air is denser and sinks, Warm air is less dense so it rises.

A **high pressure system** pulls air down towards the surface and creates clear skies.

A **low pressure system** pulls air up away from the surface and creates cloudy skies with a high chance of precipitation.

Tropical= warm

Polar= cold

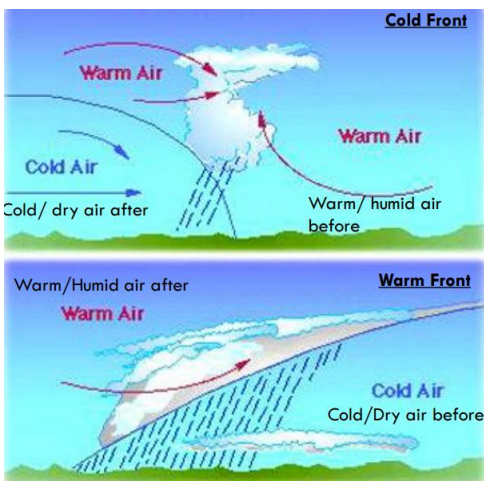
Continental= dry

Maritime=wet/humid

Front: the boundary where unlike air masses meet.

Cold front: a fast-moving cold air mass overtakes a warm air mass; the warm air is pushed upward.

Warm front: a warm air mass overtakes a slow-moving cold air mass; warm air moves over the cold air.



Weather describes the atmospheric conditions at a specific place at a specific point in time. Two most important factors: temperature and precipitation.

Climate refers to the statistics of weather. In other words, the average pattern for weather over a period of months, years, decades, or longer in a specific place. Two most important factors: average temperature and average precipitation.