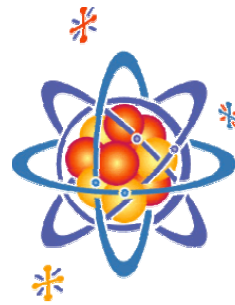


ACT Vocabulary



Daily ACT Vocabulary

Absolute zero:

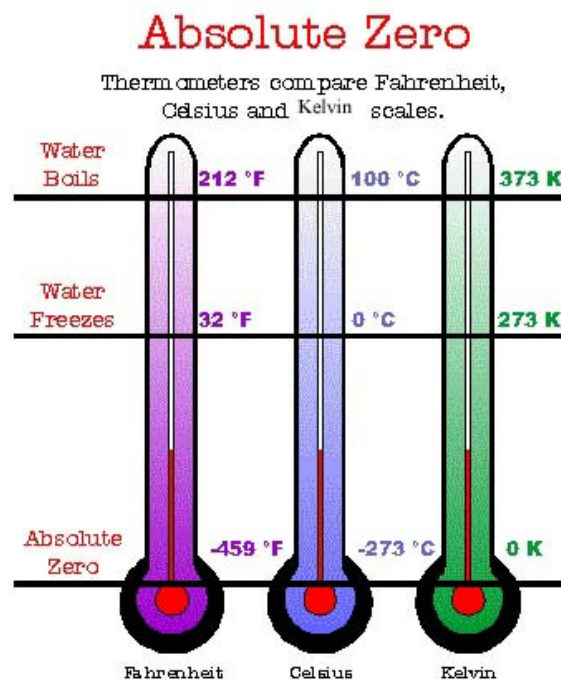
Approximately:

-273 C

-459 F

0 K

The lowest possible temperature.



Daily ACT Vocabulary

Acid:

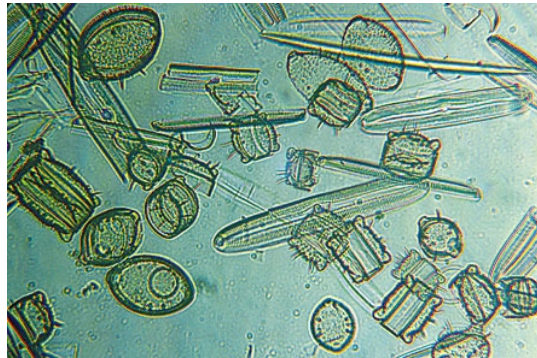
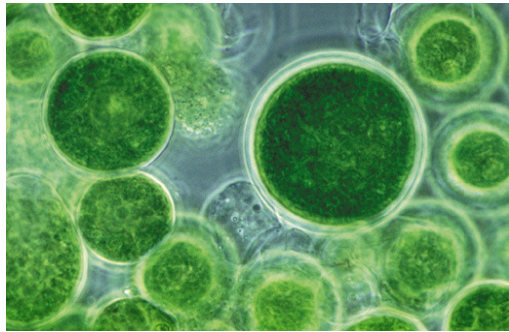
a compound that releases hydrogen (H^+) ions when dissolved in water; has a pH less than 7.

Concentration of Hydrogen ions compared to distilled water		Examples of solutions at this pH
10,000,000	pH = 0	Battery acid, Strong Hydrofluoric Acid
1,000,000	pH = 1	Hydrochloric acid secreted by stomach lining
100,000	pH = 2	Lemon Juice, Gastric Acid Vinegar
10,000	pH = 3	Grapefruit, Orange Juice, Soda
1,000	pH = 4	Tomato Juice Acid rain
100	pH = 5	Soft drinking water Black Coffee
10	pH = 6	Urine Saliva
1	pH = 7	"Pure" water
1/10	pH = 8	Sea water
1/100	pH = 9	Baking soda

Daily ACT Vocabulary

Algae:

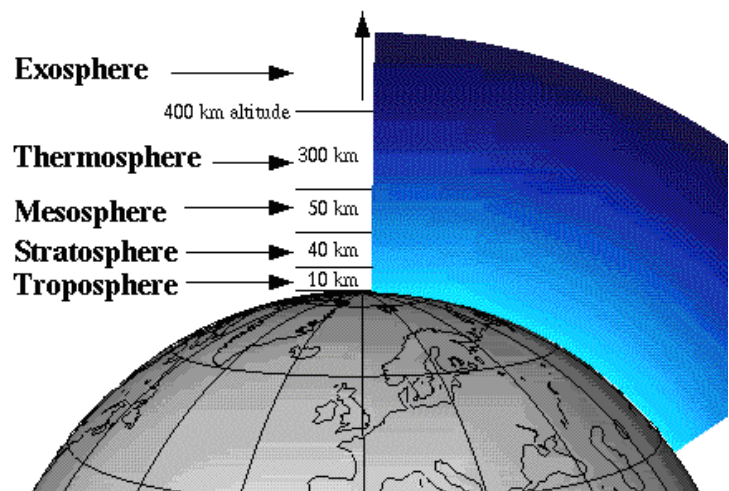
simple, one-celled
plantlike organism
found in water or
damp places;
includes seaweeds,
pond scum and so
on.



Daily ACT Vocabulary

Atmosphere:

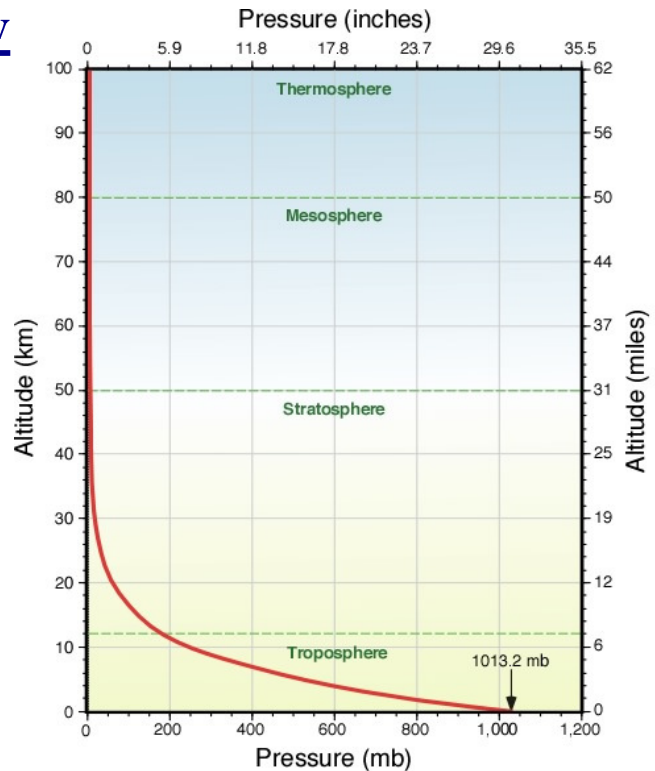
the layer of air surrounding the Earth.



Daily ACT Vocabulary

Atmospheric Pressure:

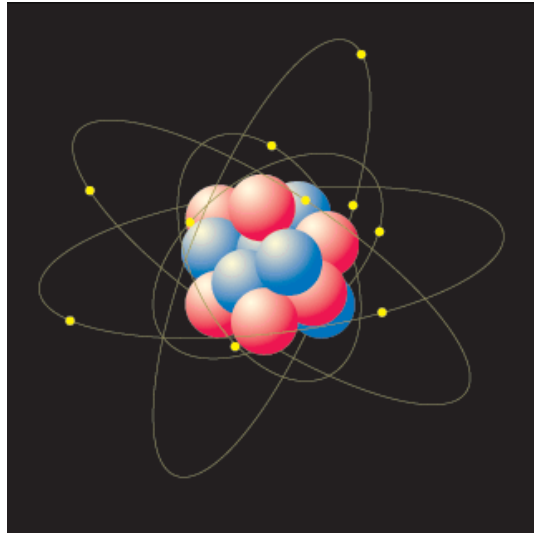
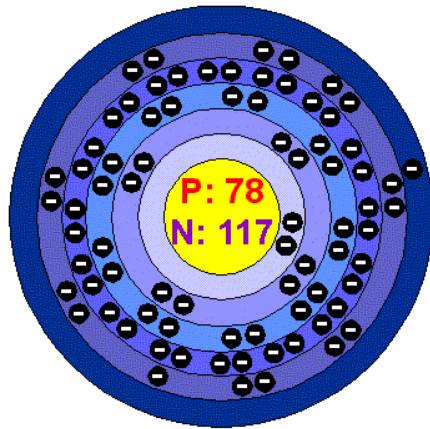
The pressure exerted by the atmosphere on every part of Earth's Surface, approximately 10 newtons per centimeter (10 N/cm^2)



Daily ACT Vocabulary

Atom:

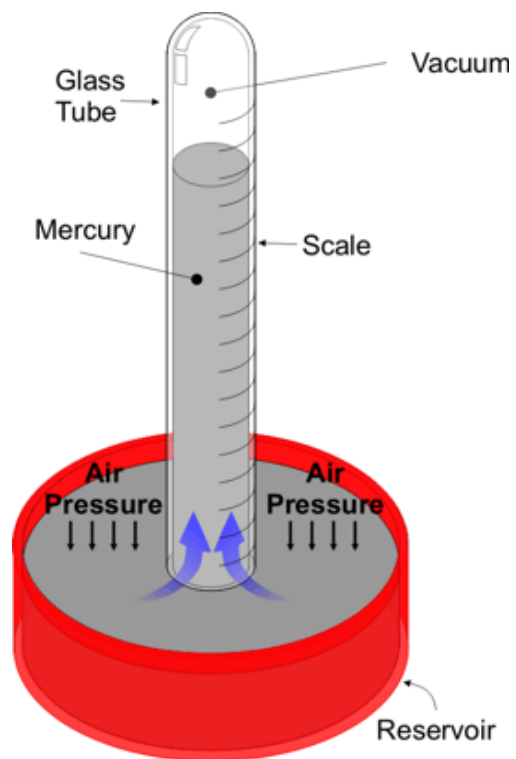
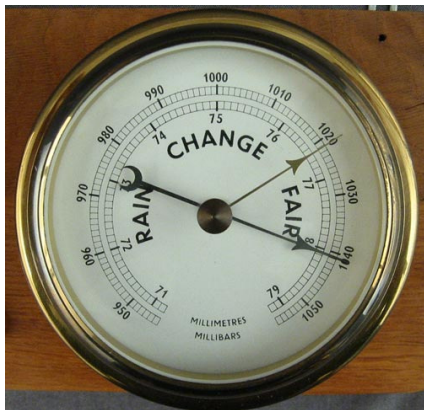
The smallest part of an element that is recognizable as an element.



Daily ACT Vocabulary

Barometer:

An instrument that measures atmospheric pressure.



Daily ACT Vocabulary

Base:

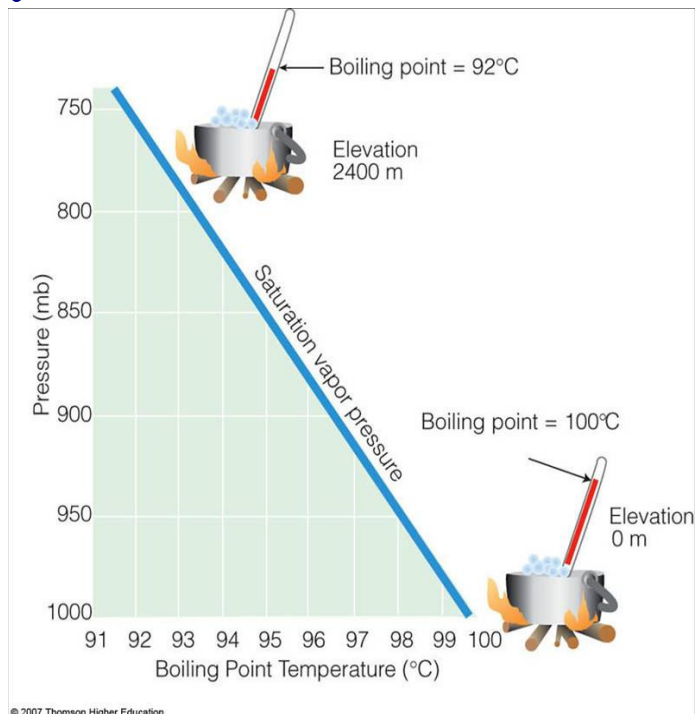
A compound that releases hydroxide ions (OH^-) in water; has a pH greater than 7; called *alkali*.

1	pH = 7	"Pure" water
1/10	pH = 8	Sea water
1/100	pH = 9	Baking soda
1/1,000	pH = 10	Great Salt Lake Milk of Magnesia
1/10,000	pH = 11	Ammonia solution
1/100,000	pH = 12	Soapy water
1/1,000,000	pH = 13	Bleaches Oven cleaner
1/10,000,000	pH = 14	Liquid drain cleaner

Daily ACT Vocabulary

Boiling point:

The temperature at which additional thermal energy causes a substance to change from liquid to a vapor.



Daily ACT Vocabulary

Calorie:

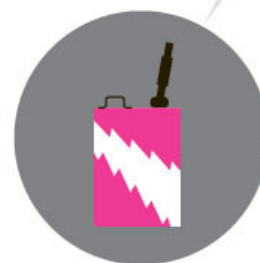
A quantity of heat; the amount needed to raise the temperature of one gram (1 g) of water 1°C. The large Calorie, or "food calorie" is a kilocalorie (1,000 calories).

1 calorie = 4.18400 joules

1 GALLON OF GASOLINE

	X	95
FILET MIGNON		
	X	69
BIG MAC		
	X	27
PINT OF BEN & JERRY'S CHUNKY MONKEY		
	X	297
MEDIUM BANANA		

1 GALLON OF GAS =
31,268 CALORIES



HEAT

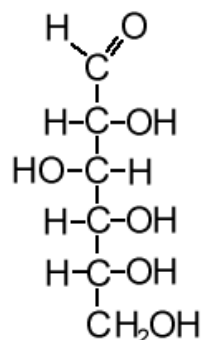
$\Delta T = 1^{\circ}\text{C}$



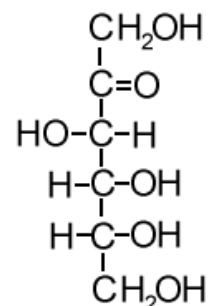
Daily ACT Vocabulary

Carbohydrate:

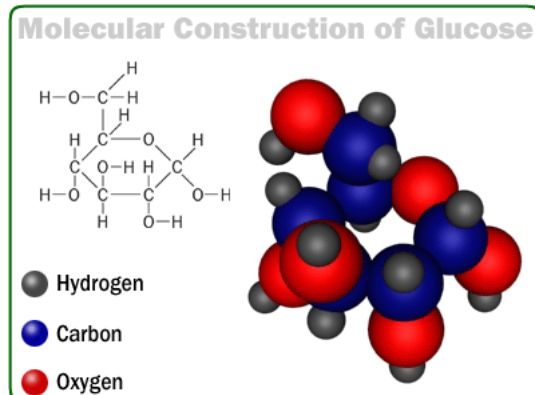
An organic compound like sugar or starch that contains carbon, hydrogen, and oxygen in the ratio 1:2:1; the human body's main source of energy.



Glucose



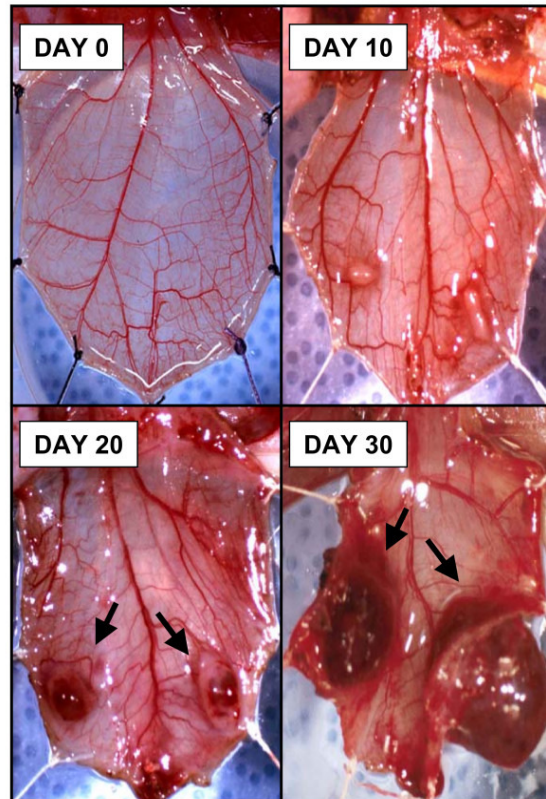
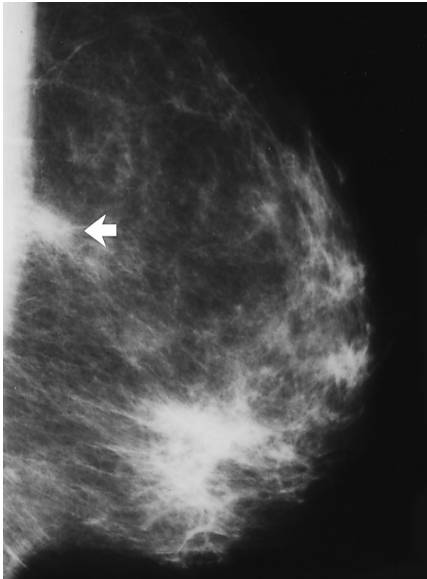
Fructose



Daily ACT Vocabulary

Carcinogen:

a cancer-causing agent



Daily ACT Vocabulary

Carnivore:

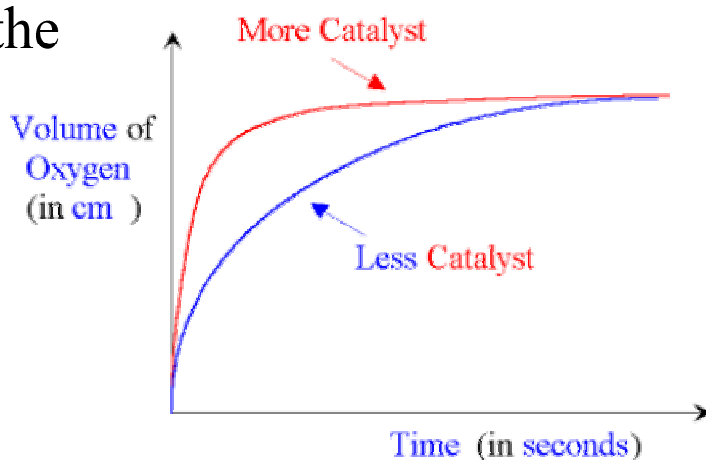
Meat eating animal.



Daily ACT Vocabulary

Catalyst:

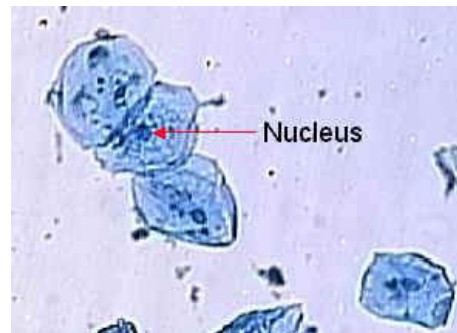
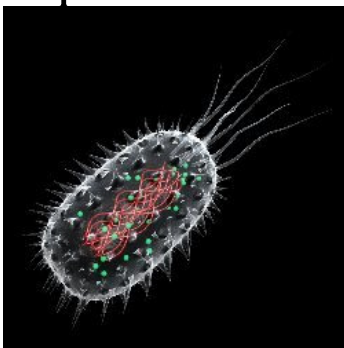
A substance that speed sup a chemical reaction without being changed by the reaction.



Daily ACT Vocabulary

Cell:

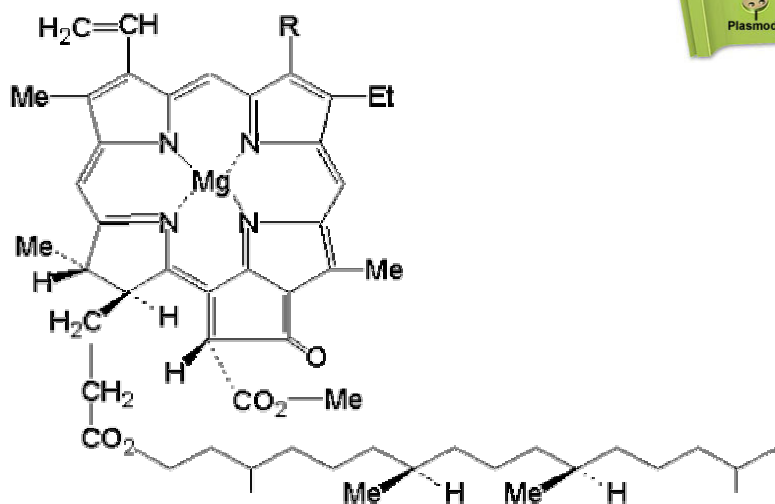
The lowest level structure of any living organism that can perform all of the functions of life, including reproduction.



Daily ACT Vocabulary

Chlorophyll:

The main pigment in plants that captures light energy during photosynthesis.



- a, $R=CH_3$
b, $R=CHO$

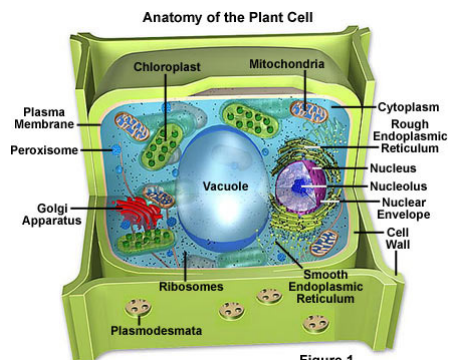
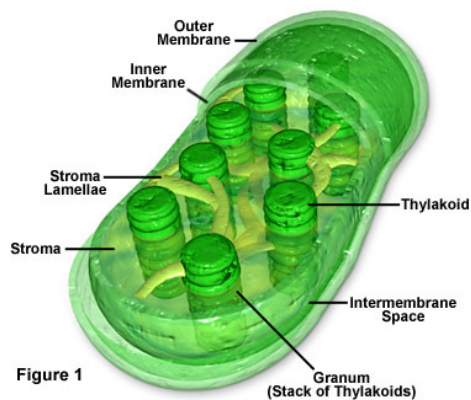


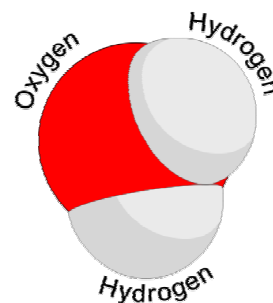
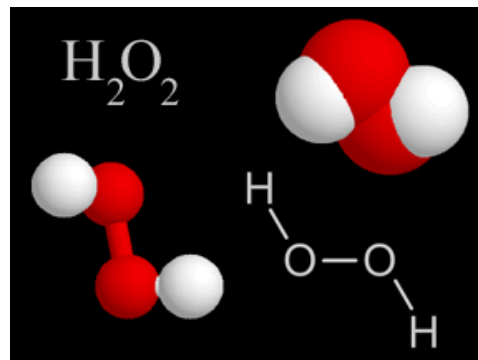
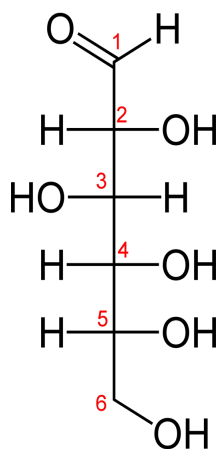
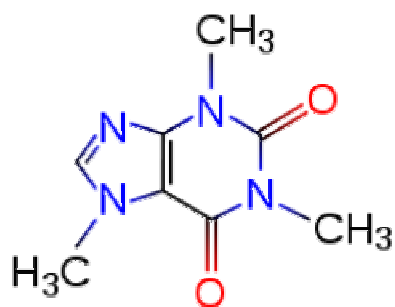
Figure 1
Plant Cell Chloroplast Structure



Daily ACT Vocabulary

Compound:

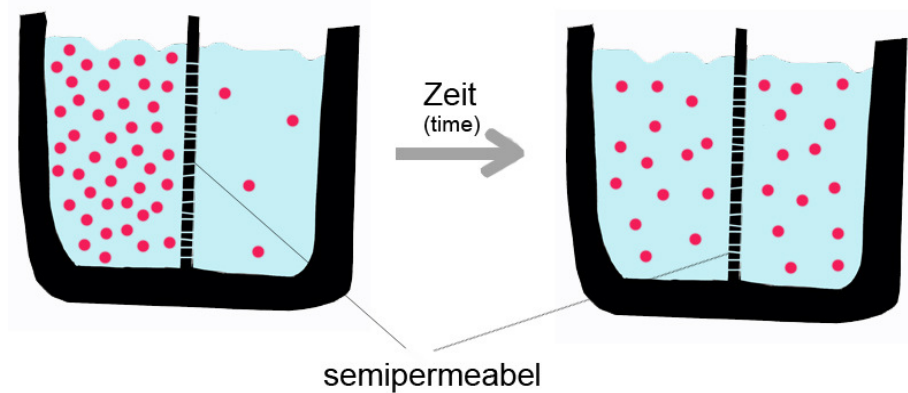
A substance composed of two or more chemically bonded elements.



Daily ACT Vocabulary

Concentration:

The exact amount of substance dissolved in a given amount of solvent; refers to a solution.

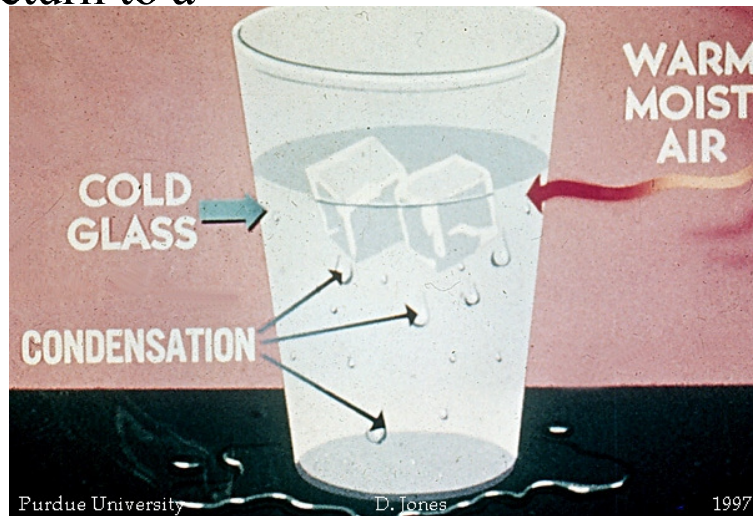


Daily ACT Vocabulary

Condensation:

The process whereby a decrease in energy causes vapor particles to return to a liquid phase.

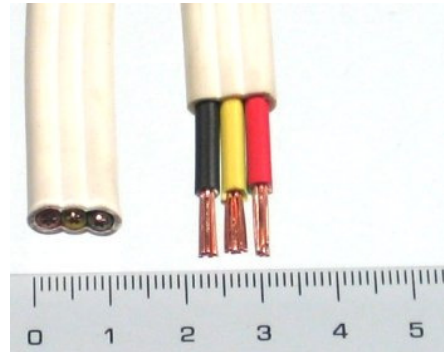
gas to liquid on a surface



Daily ACT Vocabulary

Conductor:

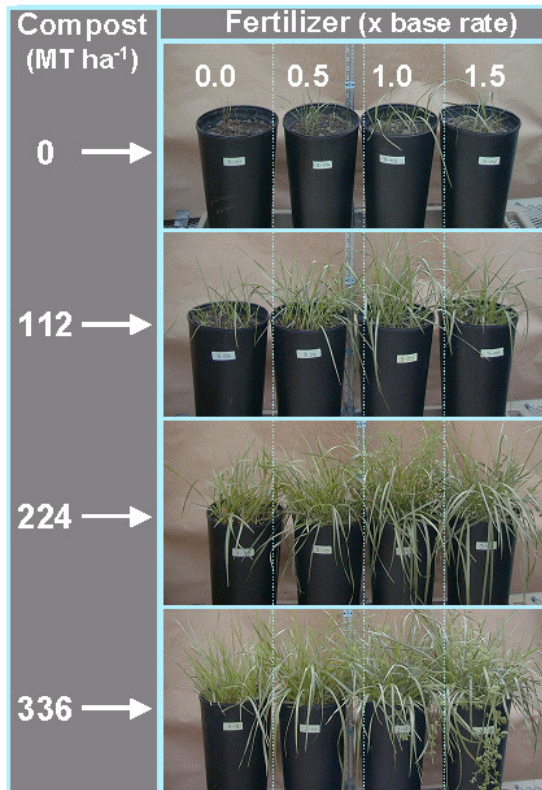
a material that allows heat or electricity to flow through it with minimal resistance.



Daily ACT Vocabulary

Control:

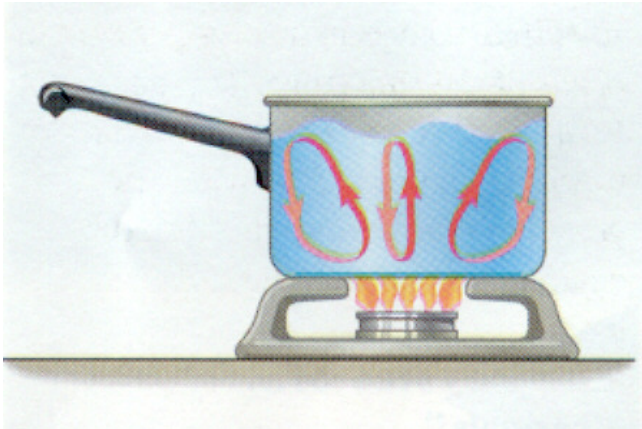
A sample that stays constant in an experiment, allowing the effect of another variable to be measured.



Daily ACT Vocabulary

Convection:

The circulation of fluid caused by warm fluid rising and cool fluid sinking.



DAY TIME



NIGHT TIME

Daily ACT Vocabulary

Density:

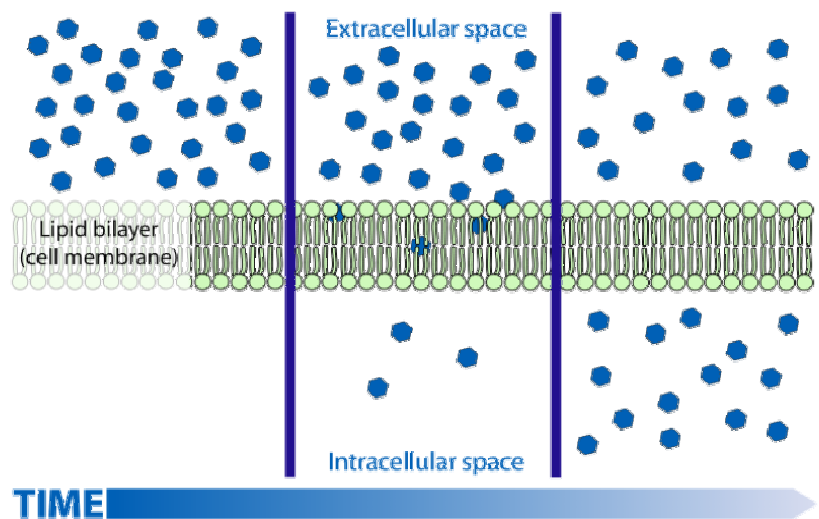
In a physics sense, the amount of mass per unit volume; in a more general science, the quantity per unit area of volume.



Daily ACT Vocabulary

Diffusion:

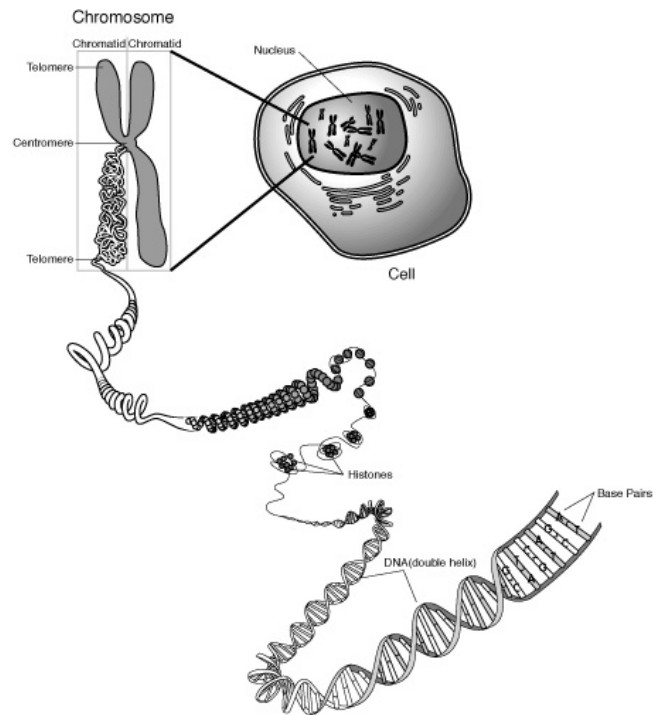
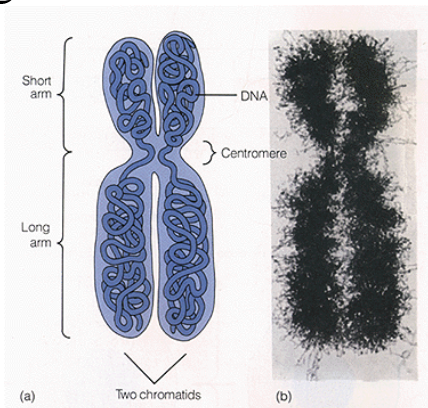
The scattering of light; the spreading of a liquid or gas from areas of high to low concentration.



Daily ACT Vocabulary

DNA:

Nucleic acid in the cell of an organism; contains the genes of the organism and transmits these to future generations.

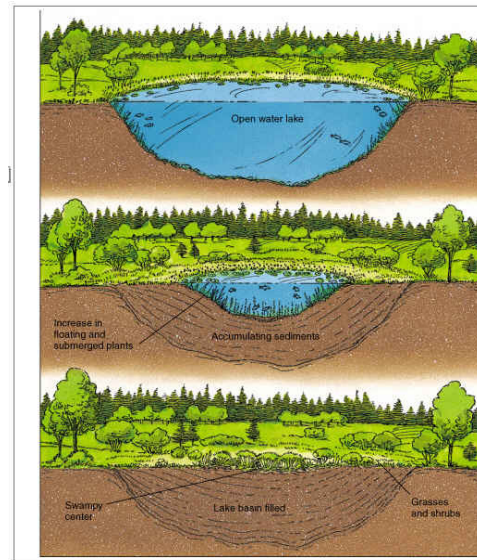
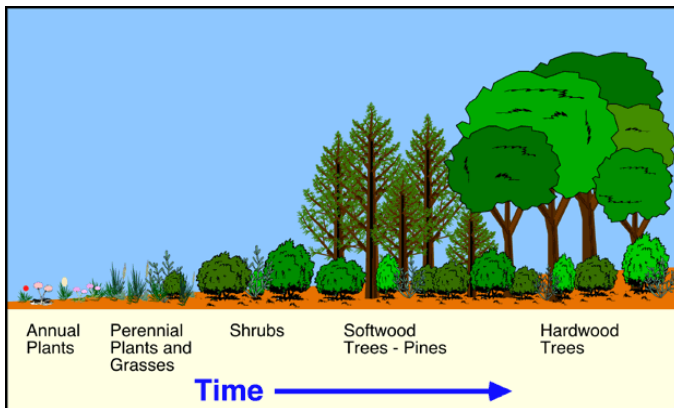


<http://www.accessexcellence.org/AB/GG/chromosome.html>

Daily ACT Vocabulary

Ecological succession:

A sequence of changes in the plant and/or animal life in a region over time.



Caption
(a) What begins as a lake gradually fills with organic and inorganic sediments, which successively shrink the area of the pond. A bog forms, then a marshy area, and finally a meadow completes the successional stages. (b) Aquatic succession in a mountain lake. [Photo by Bobbé Christopherson.]

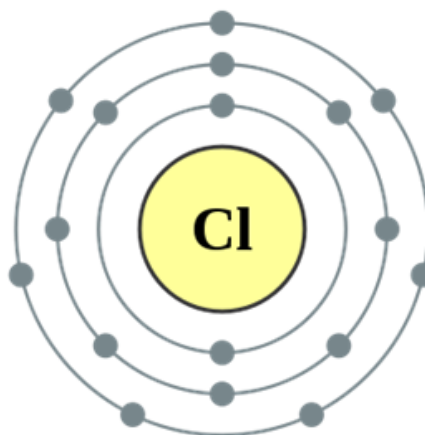
Daily ACT Vocabulary

Electron:

A negatively charged
fundamental atomic particle.

17: Chlorine

2,8,7



Daily ACT Vocabulary

Erosion:

wearing away; typically the washing away of sand or rock by wind or water.

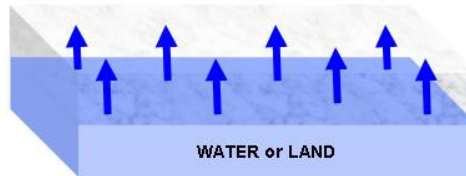


Daily ACT Vocabulary

Evaporation:

The changing of liquid into a gas.

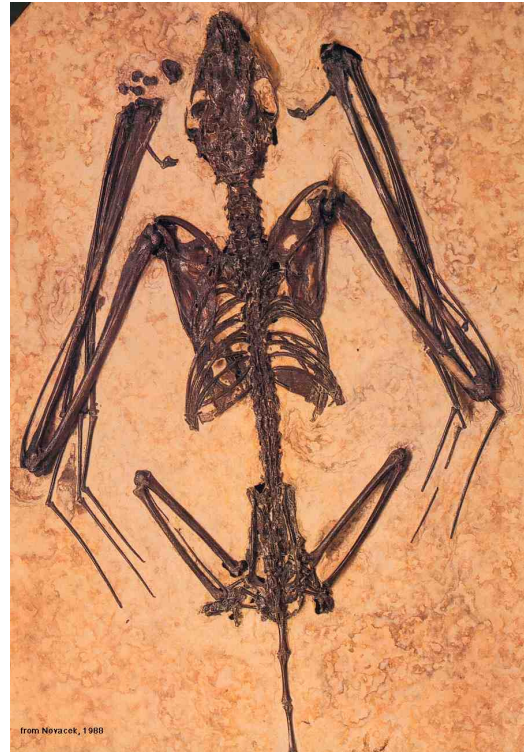
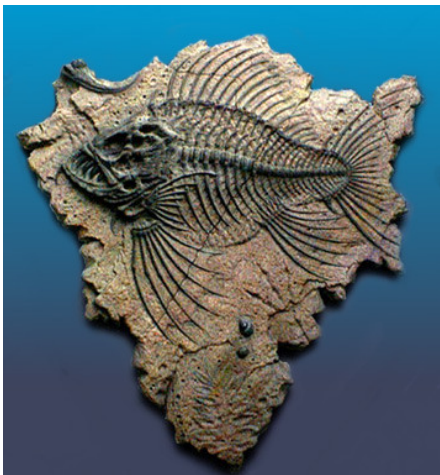
EVAPORATION CONTINUOUSLY MOVES
WATER FROM THE SURFACE TO THE ATMOSPHERE



Daily ACT Vocabulary

Fossil:

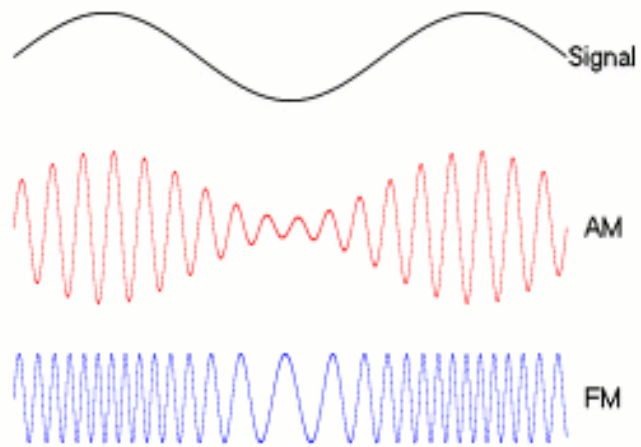
The preserved remains of a very old organism



Daily ACT Vocabulary

Frequency:

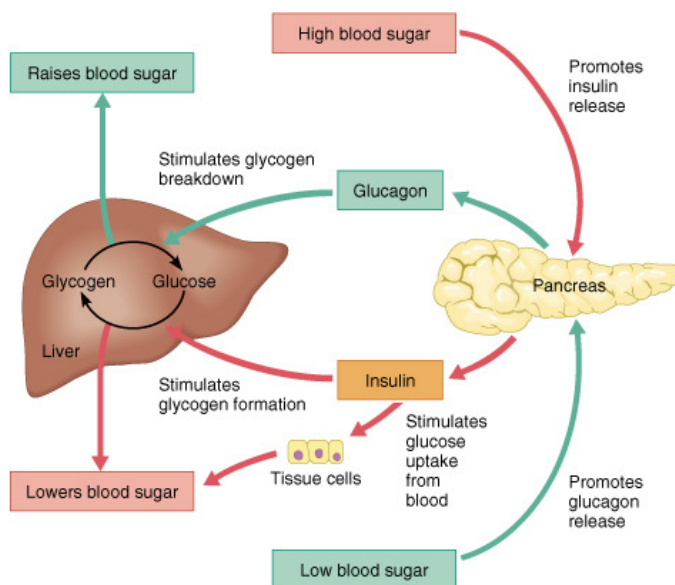
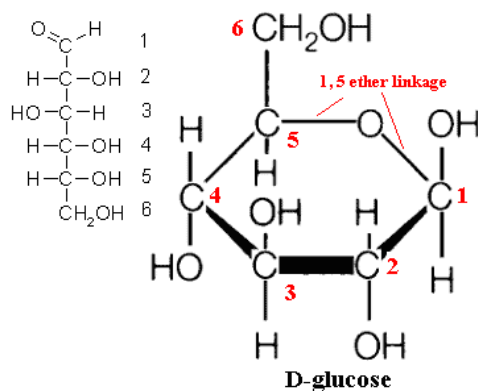
The number of cycles per unit of time of a repeating phenomenon.



Daily ACT Vocabulary

Glucose:

A simple sugar that is broken down to provide energy to an organism.



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Daily ACT Vocabulary

Habitat:

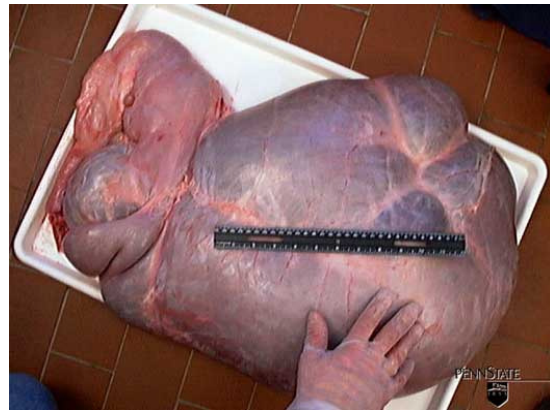
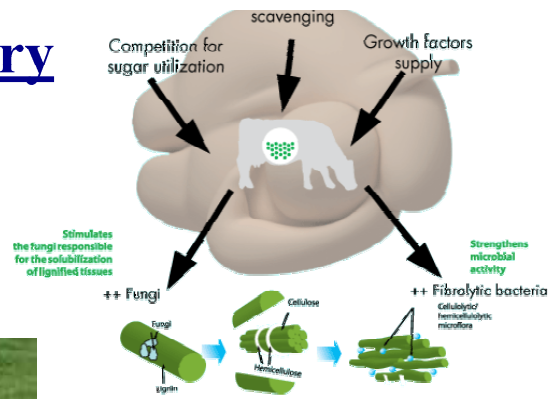
The part of an ecosystem where a plant or an animal naturally grows or lives.



Daily ACT Vocabulary

Herbivore:

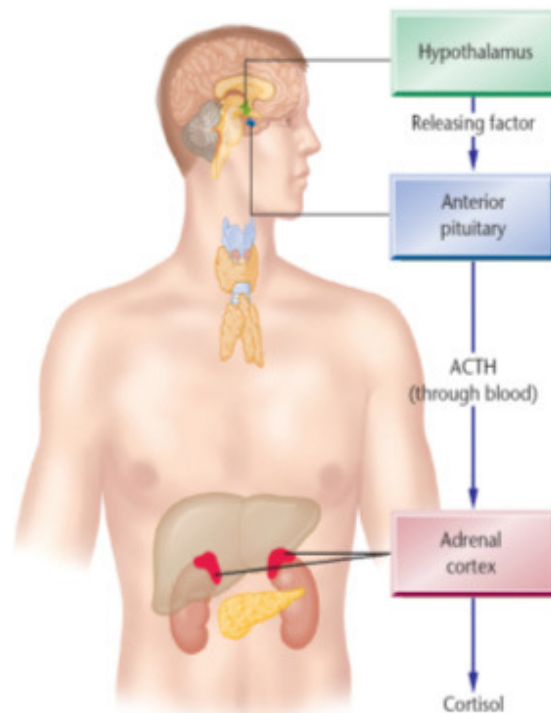
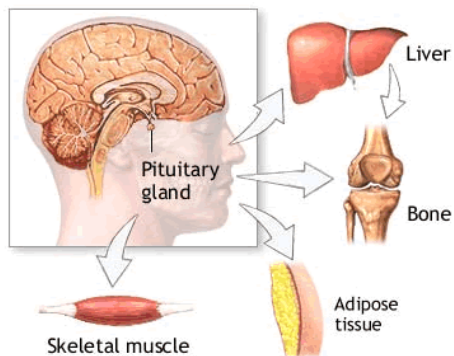
An animal that only eats plants.



Daily ACT Vocabulary

Hormone:

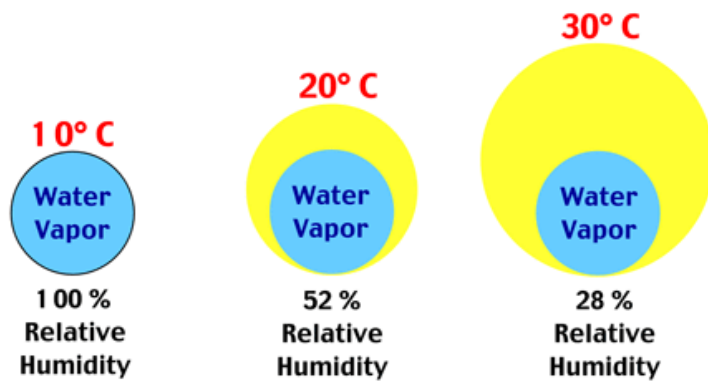
A chemical substance secreted by a gland of the body that affects other parts of the body.



Daily ACT Vocabulary

Humidity:

The amount of water vapor in air.



Daily ACT Vocabulary

Hypothesis:

A statement that is a proposed explanation of a scientific phenomenon.

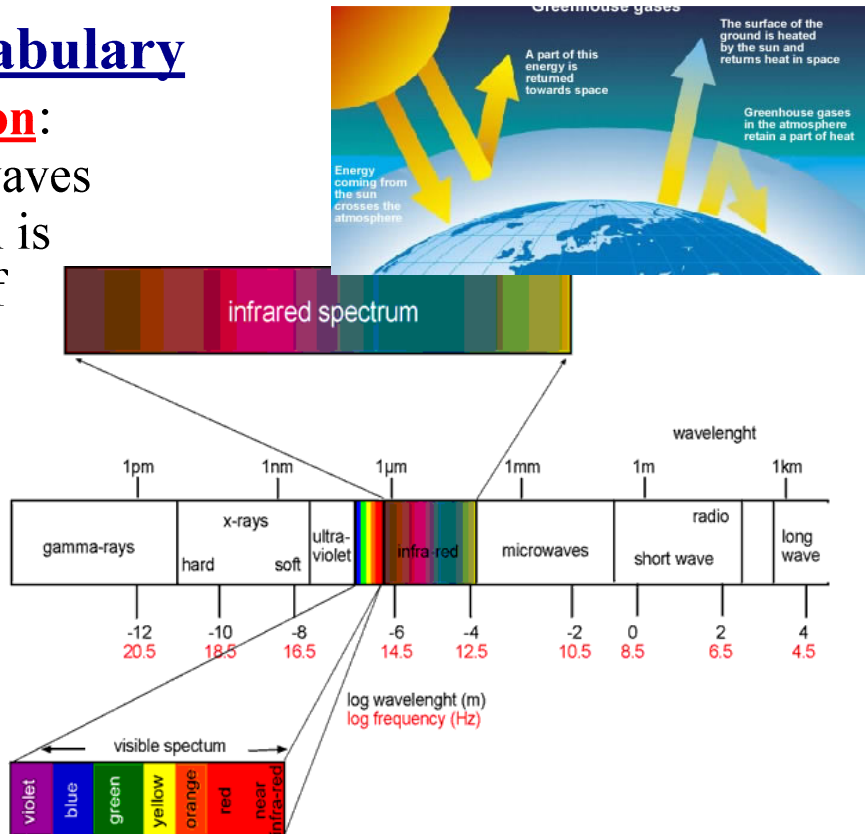


If... Then

Daily ACT Vocabulary

Infrared Radiation:

Electromagnetic waves whose wavelength is longer than that of visible light.



Daily ACT Vocabulary

Insulator:

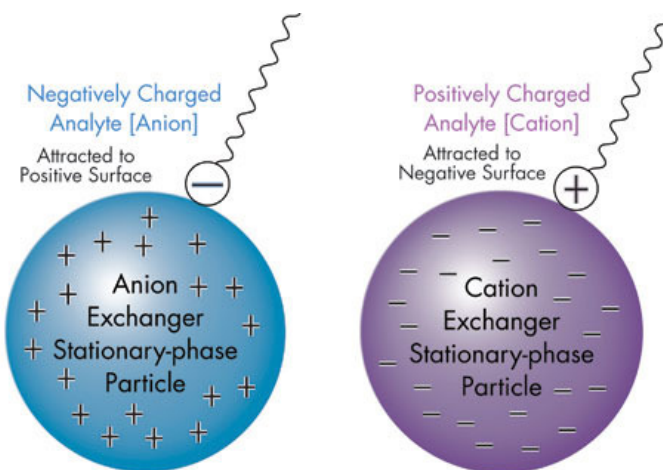
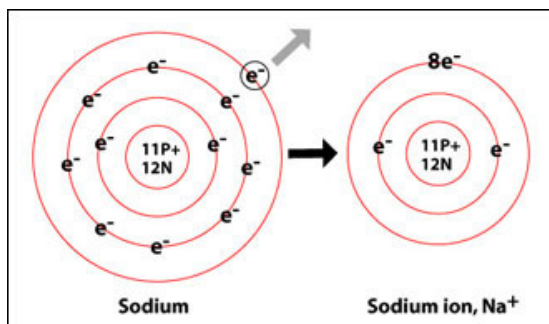
A substance that blocks the flow of heat or electricity.



Daily ACT Vocabulary

Ion:

A molecule or atom that has become charged by either gaining or losing an electron.



Daily ACT Vocabulary

Isotope:

A variety of an element with the same number of protons per atom but a different number of neutrons.

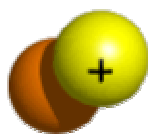
The Nuclei of the Three Isotopes of Hydrogen

Protium



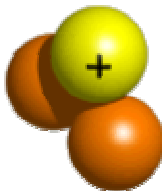
1 proton

Deuterium

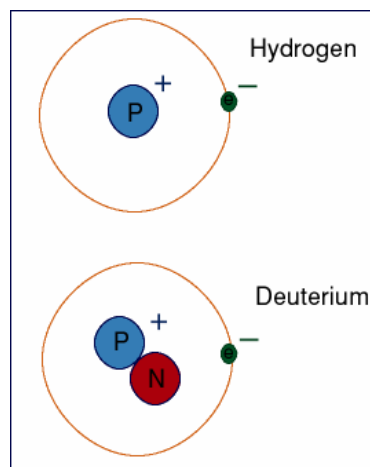


1 proton
1 neutron

Tritium



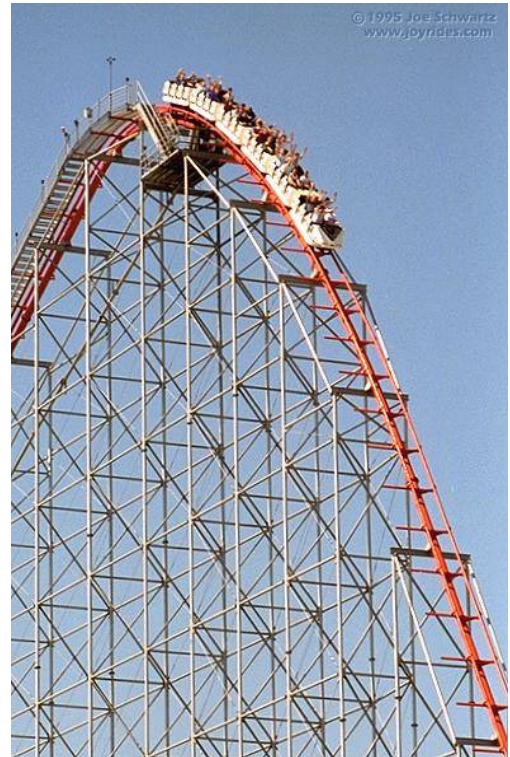
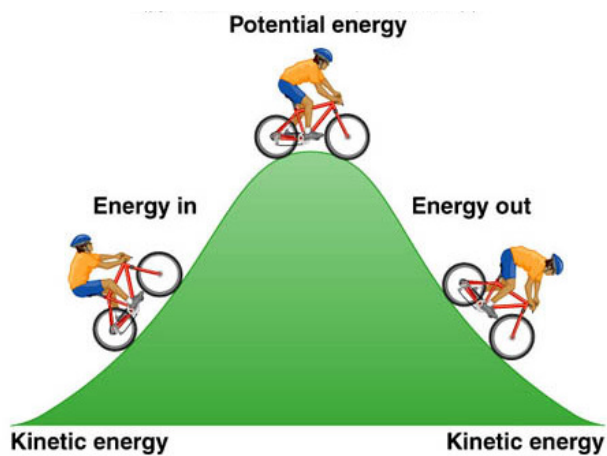
1 proton
2 neutrons



Daily ACT Vocabulary

Kinetic Energy:

The energy of an object due to its motion.



Daily ACT Vocabulary

Melting Point:

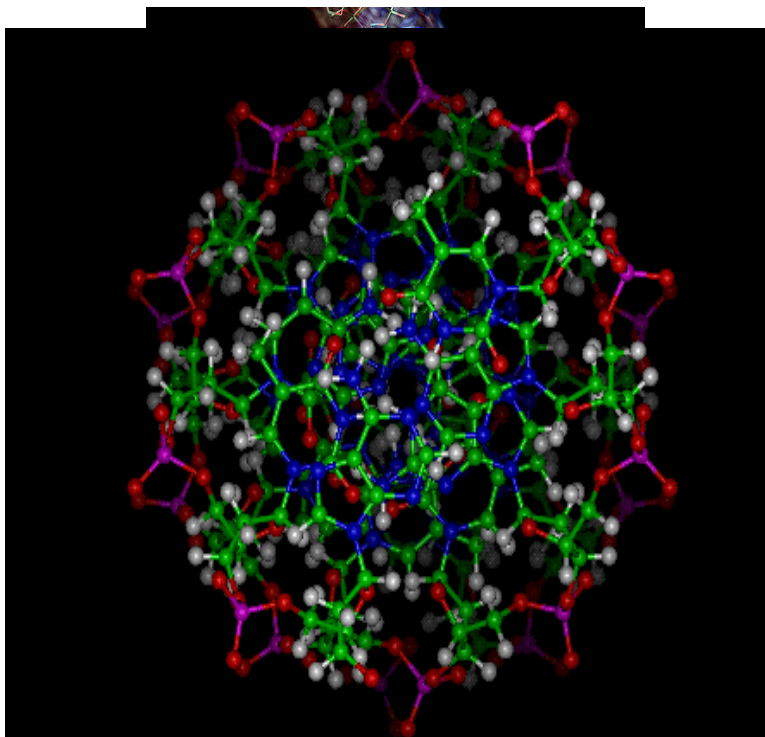
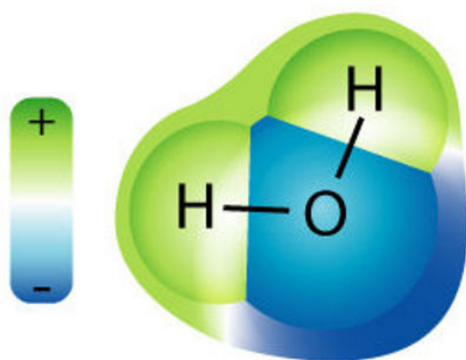
The temperature at which additional thermal energy breaks the chemical bonds holding a substance together and causes the substance to change from a solid to a liquid state.



Daily ACT Vocabulary

Molecule:

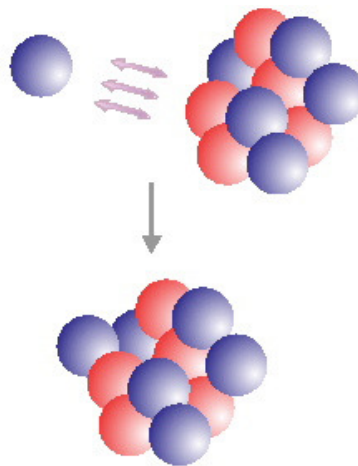
The smallest unit of a chemical compound.



Daily ACT Vocabulary

Neutron:

A fundamental atomic particle that has no charge.



Daily ACT Vocabulary

Ore:

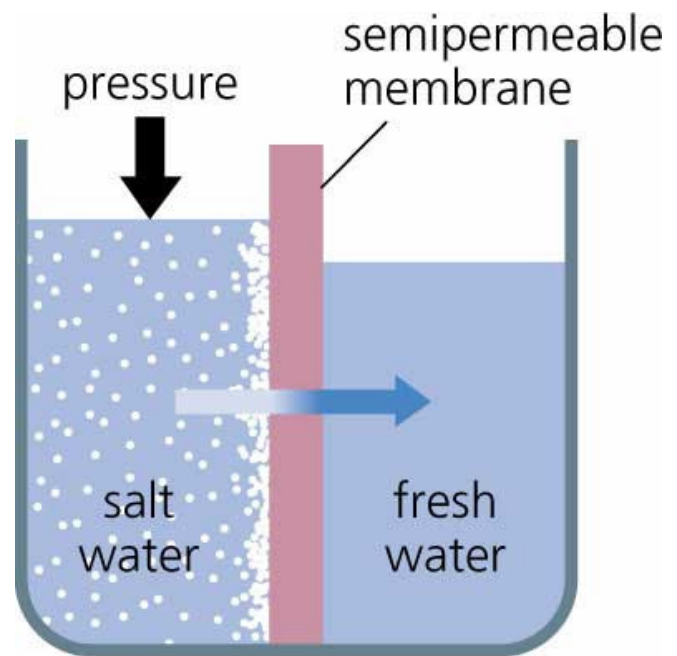
A piece of rock from which metal can be profitable extracted.



Daily ACT Vocabulary

Osmosis:

The movement of liquid through a membrane.

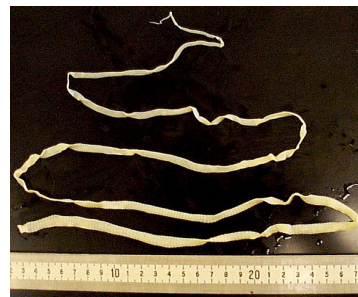


Precision Graphics

Daily ACT Vocabulary

Parasite:

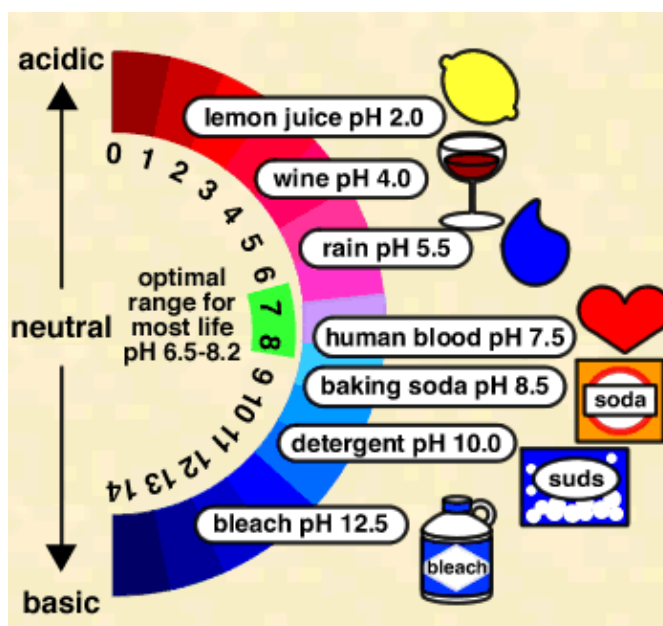
An organism that invades another organism (its host) and feeds off the host.



Daily ACT Vocabulary

pH:

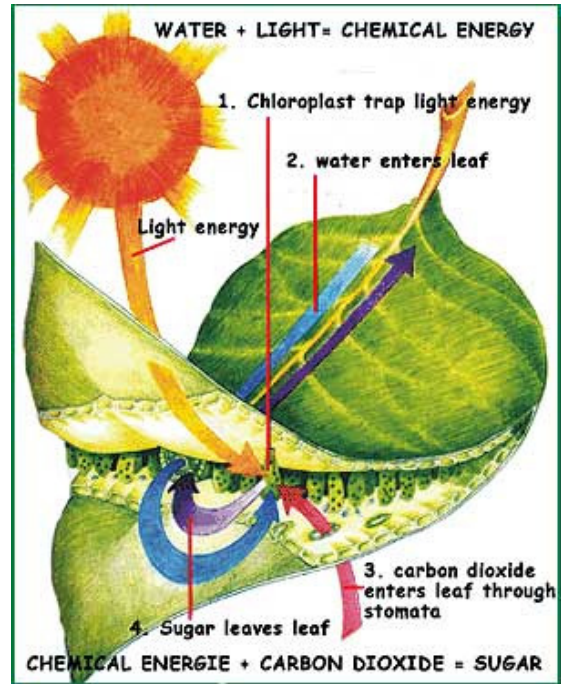
a numerical scale from 1-14 representing the acidity or alkalinity of a solution. 1 is very acidic. 7 is neutral. 14 is very alkaline.



Daily ACT Vocabulary

Photosynthesis:

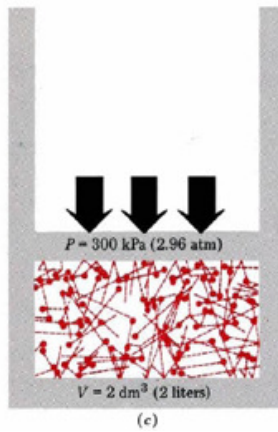
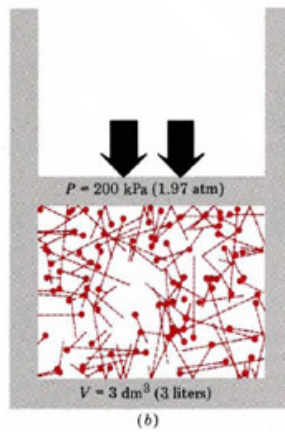
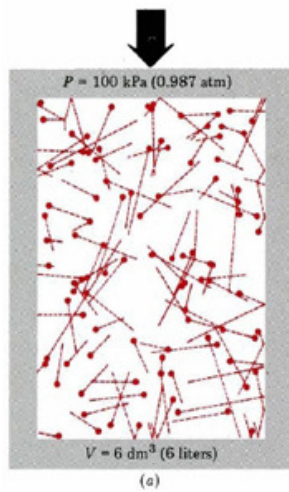
The process in which plants use the sun's energy to convert carbon dioxide and water into glucose.



Daily ACT Vocabulary

Pressure:

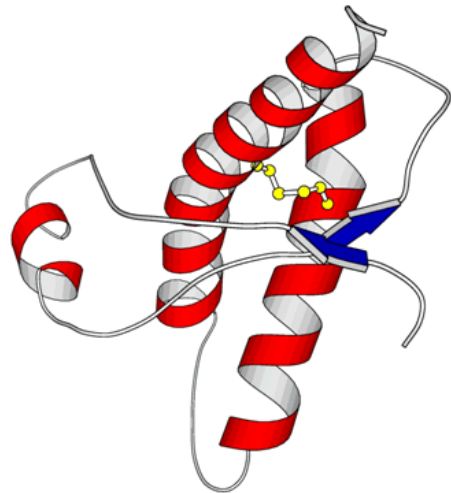
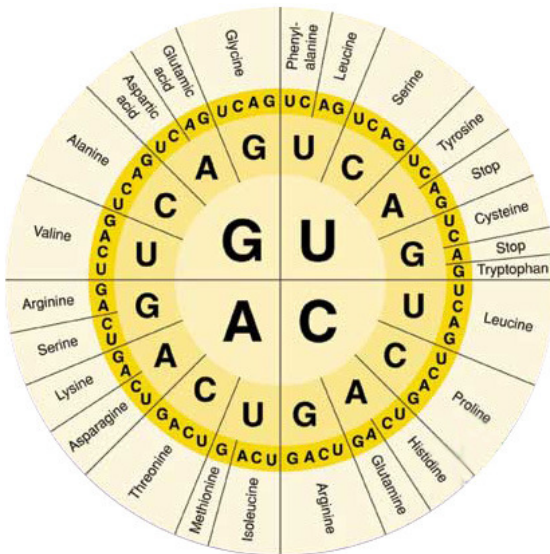
force per unit square



Daily ACT Vocabulary

Protein:

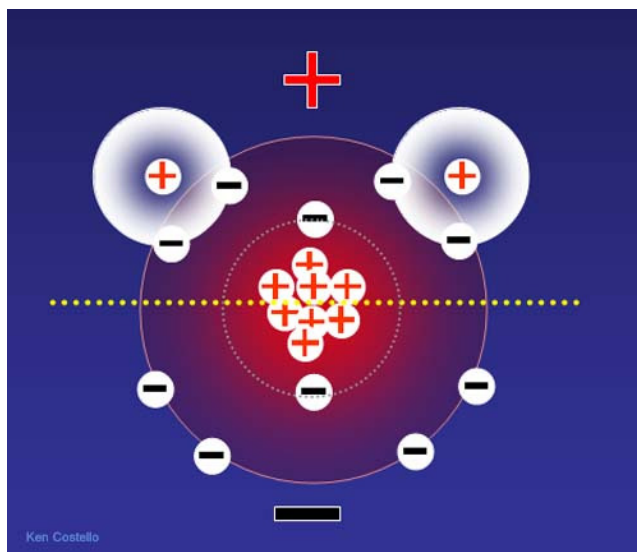
A complex molecule composed of amino acids that carries out a variety of processes in cells.



Daily ACT Vocabulary

Proton:

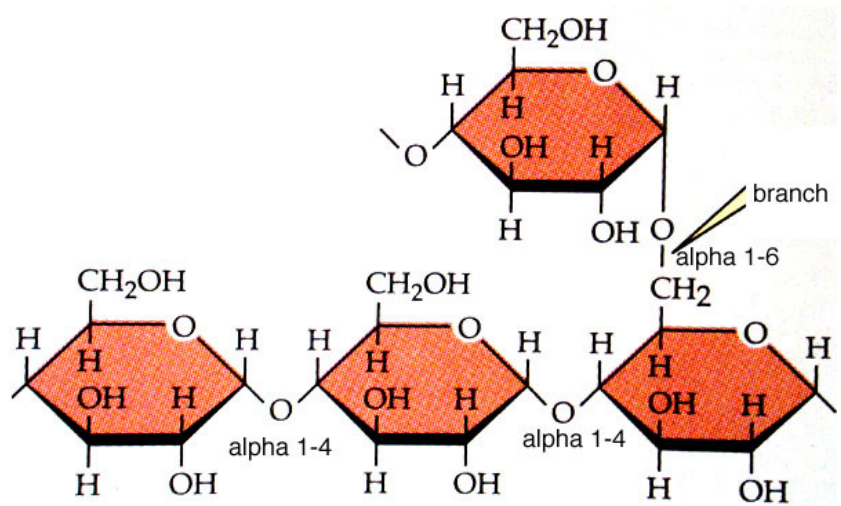
A positively charged fundamental atomic particle.



Daily ACT Vocabulary

Starch:

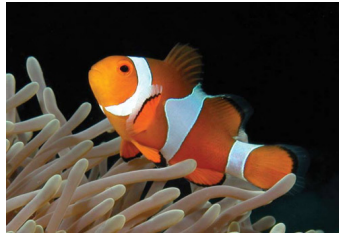
A complex carbohydrate found in potatoes, rice, corn and many other vegetables.



Daily ACT Vocabulary

Symbiosis:

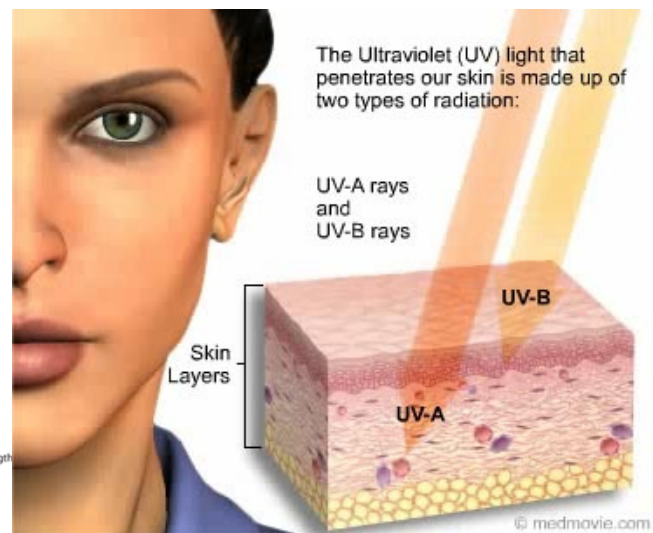
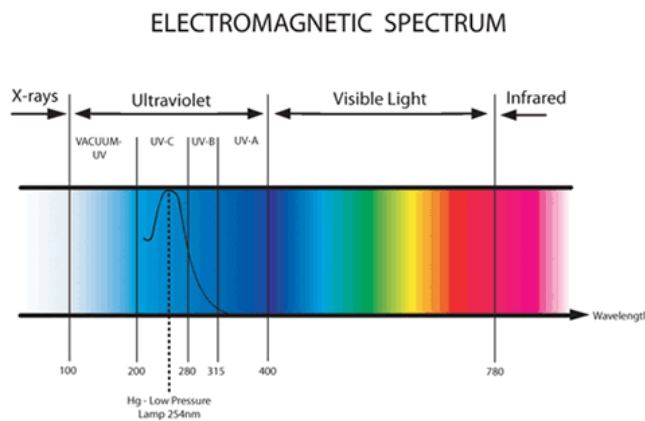
A close relationship between two organisms that is mutually beneficial.



Daily ACT Vocabulary

Ultraviolet radiation:

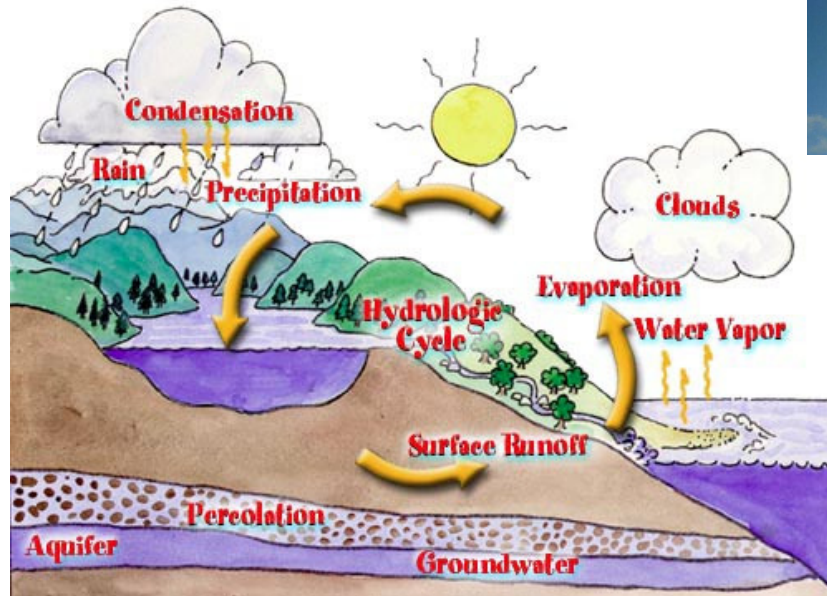
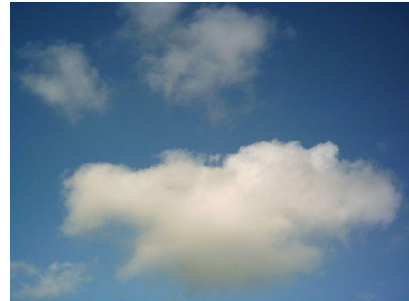
Electromagnetic waves with wavelength shorter than that of visible light.



Daily ACT Vocabulary

Vapor:

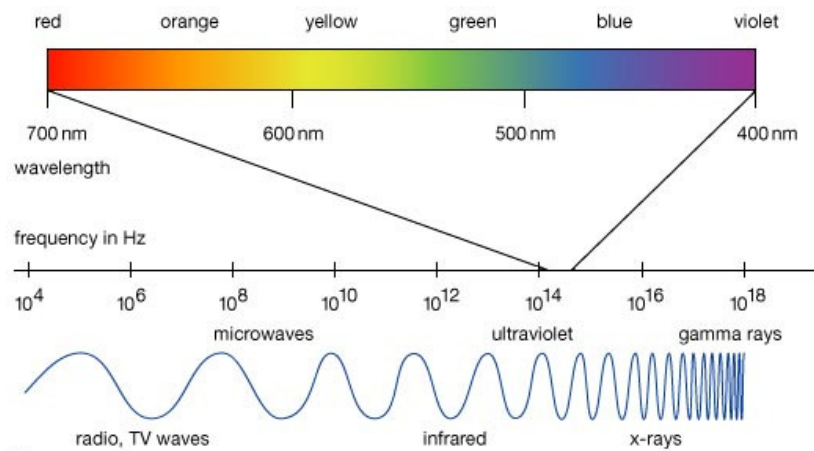
The gaseous form of a liquid.



Daily ACT Vocabulary

X Ray:

Electromagnetic radiation with wavelength shorter than ultraviolet radiation.



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