



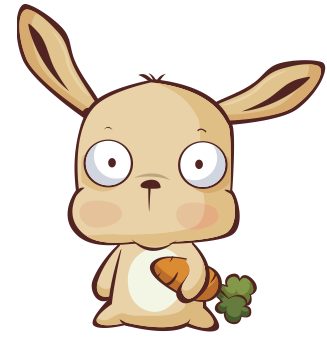
Reporting Category 4

# 8<sup>th</sup> Grade Science STAAR

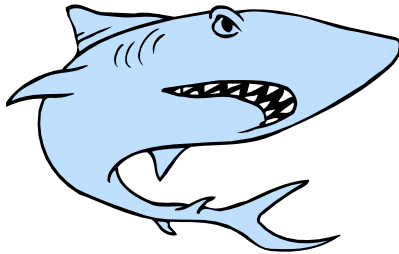
# Name the Relationships



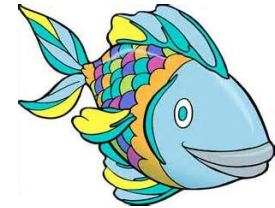
\_\_\_\_\_ / \_\_\_\_\_



\_\_\_\_\_ / \_\_\_\_\_



\_\_\_\_\_ / \_\_\_\_\_



\_\_\_\_\_ / \_\_\_\_\_



Predator / Prey

Producer / Consumer

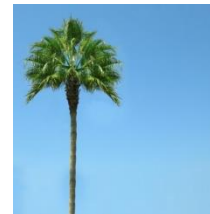
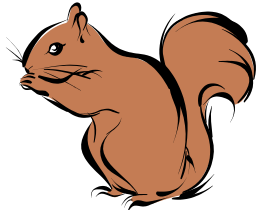
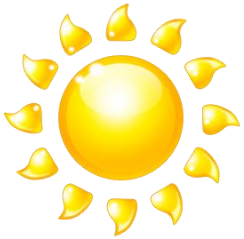
Predator / Prey

Parasite / Host

# Factors in an Environment

Abiotic factors are factors that are \_\_\_\_\_

Biotic factors are factors that are \_\_\_\_\_



\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Nonliving

Living

Abiotic

Biotic

Abiotic

Biotic

Abiotic

\_\_\_\_\_ environmental change is a change that occurs quickly and affects organism immediately.



\_\_\_\_\_ environmental change is a change that occurs slowly over time and affects organisms over generations.

Short Term

Long Term

# Human Activities Modify Ocean Systems



Something that drains or flows over the land into streams

Harvesting a resource to the point of diminishment



A man-made, underwater structure that promotes marine life



The addition of harmful chemicals to natural water



Overharvesting

Runoff

Artificial Reefs

Pollution

\_\_\_\_\_ is the number of different species of plants and animals in an area

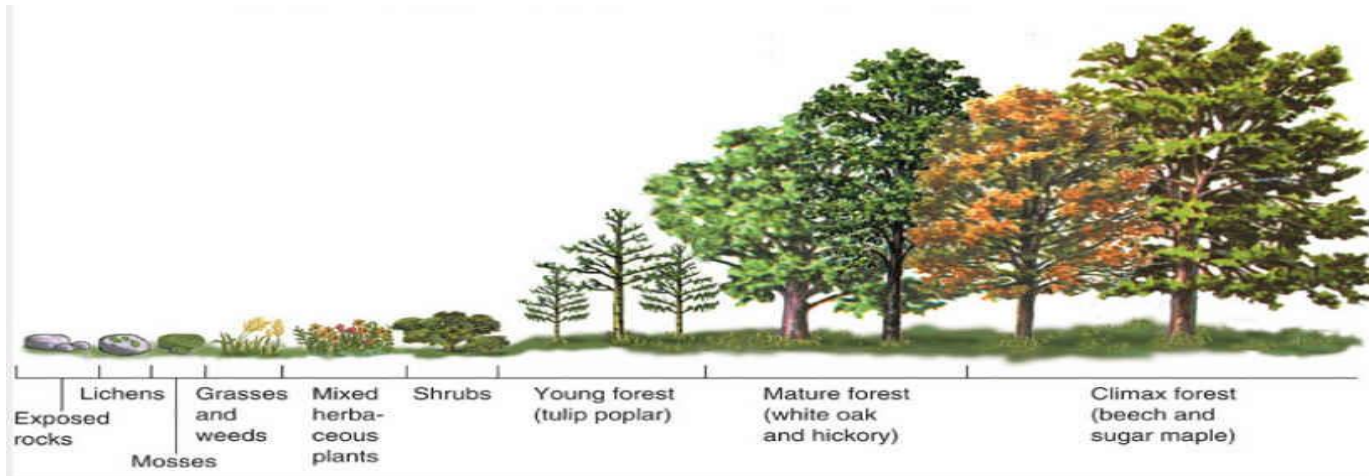
The more \_\_\_\_\_ that are in an ecosystem to choose from the more easily sustained it will be.



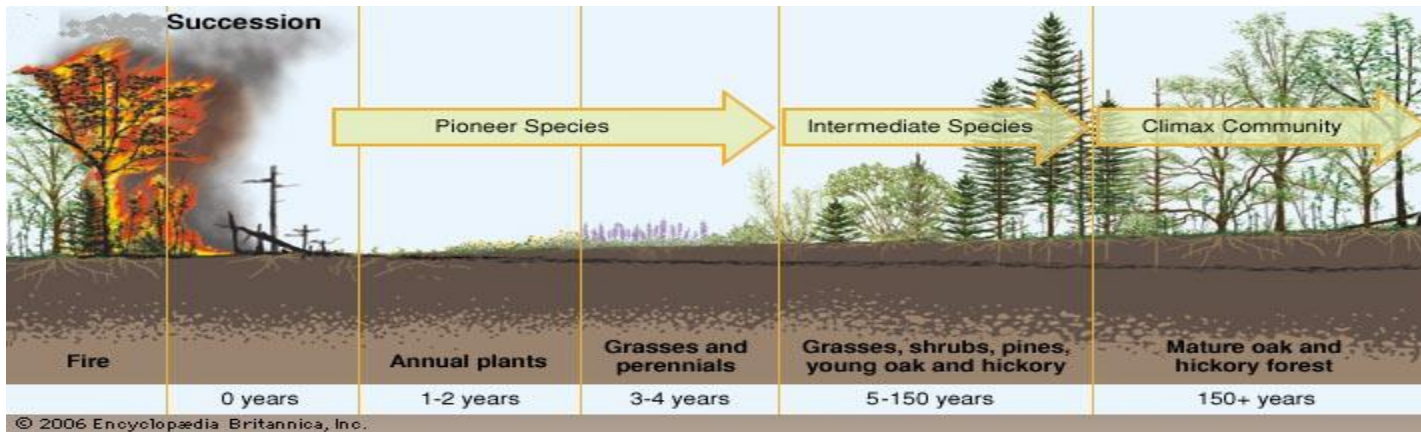
Diversity of species gives multiple options to choose from.

**Biodiversity**

**Species**



Primary succession begins with the establishment of Lichens and mosses on bare rock and no organism previously present.



Secondary succession begins with the establishment of weeds and grasses in bare soil or in previously plowed ground.

Primary

Secondary

This is a \_\_\_\_\_key.  
 This is used to identify organisms

Arachnid Observations			
#	Abdomen	Tail	Legs
1	Segmented	Present with no stinger	Shorter than body
2	Not segmented	Not present	Longer than body
3	Segmented	Present with stinger	Shorter than body

1. a) Abdomen segmented.....go to 2  
 b) Abdomen not segmented ....go to 4
2. a) Abdomen with tail.....go to 3  
 b) Abdomen without tail.....go to 5
3. a) Tail with stinger.....Scorpion  
 b) Tail without stinger..... Whipscorpion
4. a) Legs longer than body.....Daddy Long Legs  
 b) Legs not longer than body..Wind scorpion
5. a) Covered with spines .....Mite  
 b) Few spines.....Tick

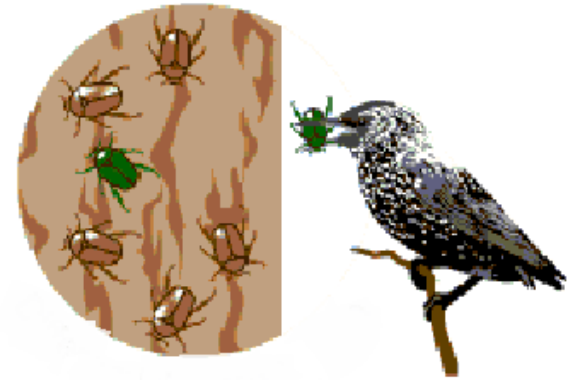
What organism is organism # 2 \_\_\_\_\_

7.11a S

Dichotomous

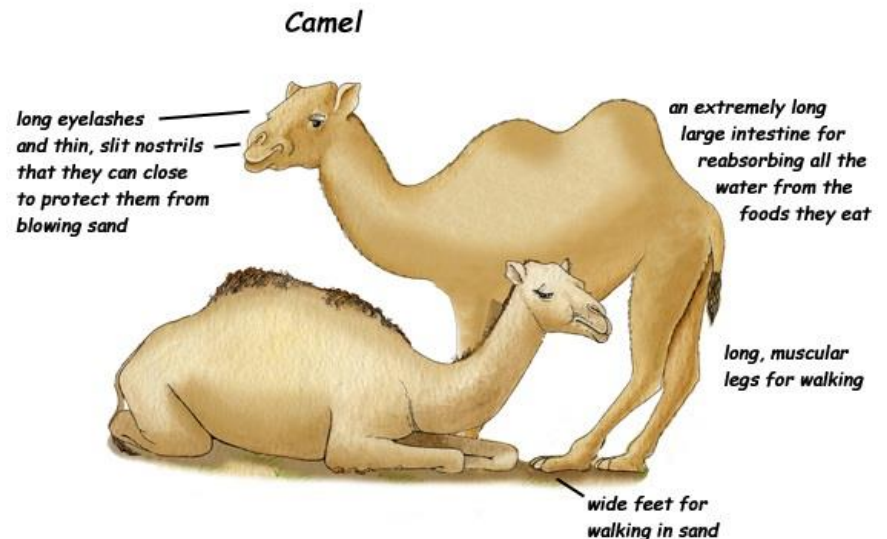
Daddy Long Legs

\_\_\_\_\_ is the process of selection whereby favorable traits become more common and less favorable traits become less common in following generations.



\_\_\_\_\_ is a form of artificial selection whereby deliberate breeding results in desired traits in plants or animals.

\_\_\_\_\_ is a process by which a population becomes better suited to its habitat; a genetic variation that provides an advantage to survive and reproduce, generally spreads through the population.



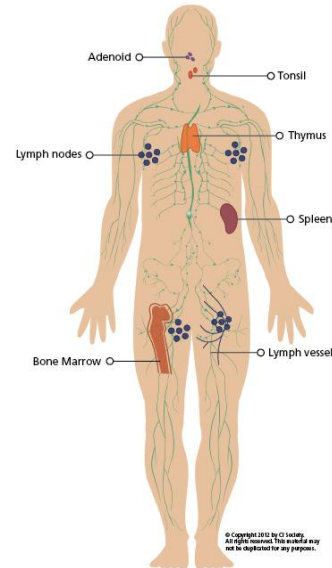
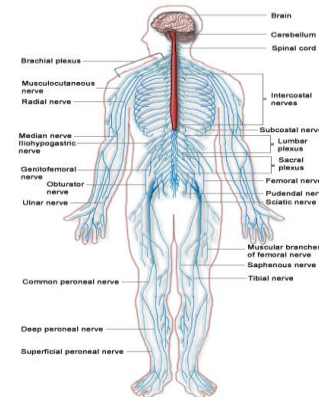
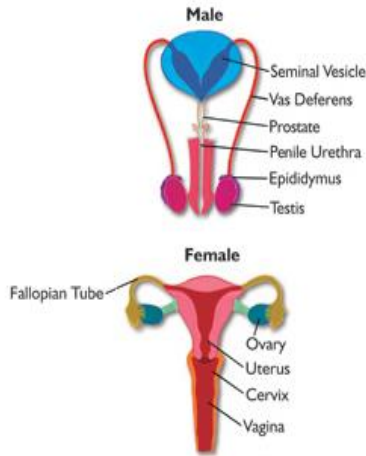
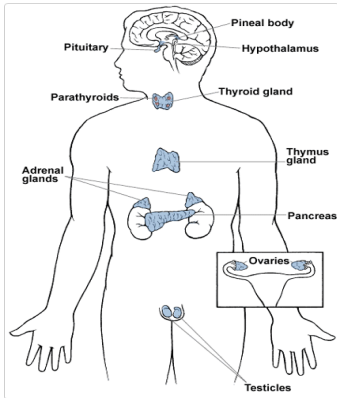
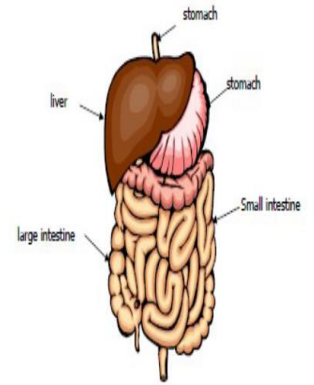
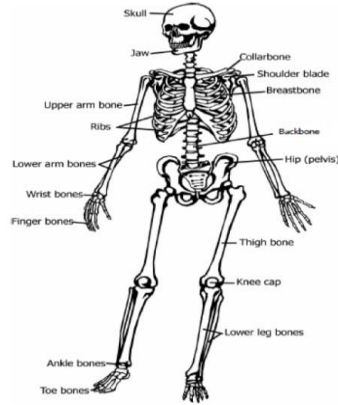
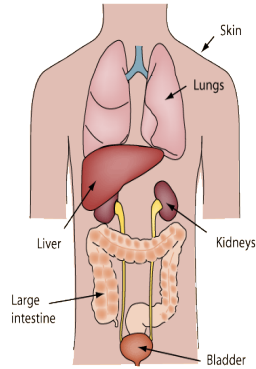
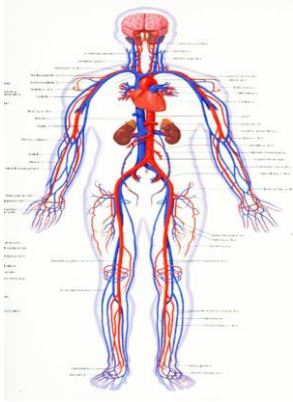


Natural Selection

Selective Breeding

Adaptation

# Identify The Body Systems and Describe Their Functions



**The circulatory system** circulates blood through the body, supplies cells with oxygen and nutrients and removes waste products

**The respiratory system** supplies blood with oxygen in the lungs and removes carbon dioxide.

**The skeletal system** holds organs in place, provides a structural support for the body and its muscles, stores minerals and contains materials to make new blood cells.

**The muscular system** allows the body to move when attached to bone, and allows movement in internal organs such as the heart and intestines.

**The digestive system** converts food into simpler substances for the body to absorb as nutrients. Breakdown of food also provides energy for all body functions.

**The excretory system** filters water and fluids from the blood while also collecting waste urine.

**The reproductive system** allows humans to continue as a species by fertilizing a female ovum with a male sperm through sexual reproduction.

**The integumentary system** continuously receives communication with the external environment (temperature, humidity, etc.) and protects the body's deeper tissues. It excretes waste, helps rid the body of heat and synthesizes vitamin D.

**The nervous and endocrine systems** work together and are the body's two systems for control and communication. The nervous system sends immediate and specific information as electrical impulses. The endocrine system sends signals in the form of hormones to the body but more slowly than the nervous system. The endocrine system controls growth, reproduction and metabolism.

**The immune system** responds to pathogens and provides defenses to the body's systems from disease.

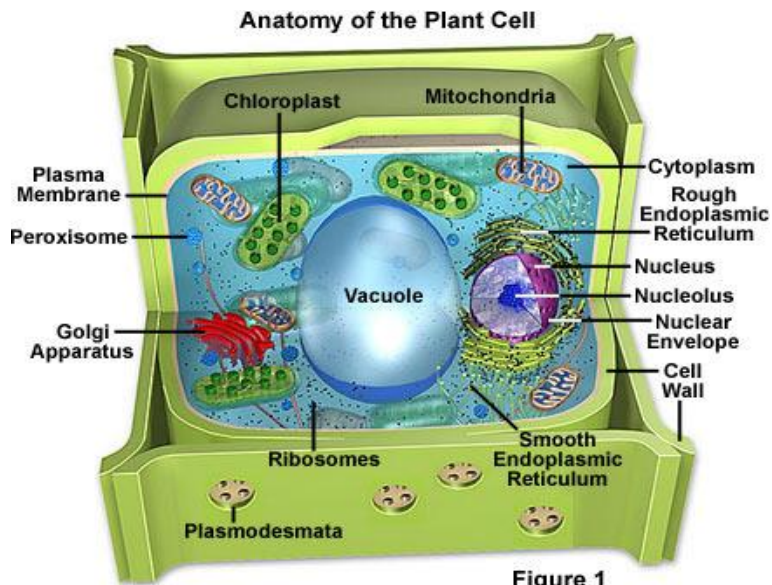
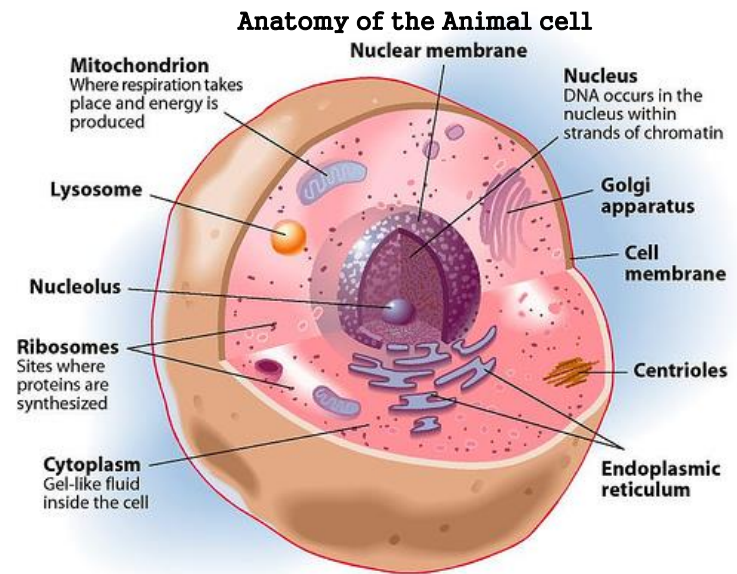


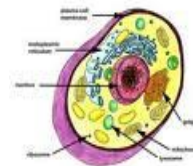
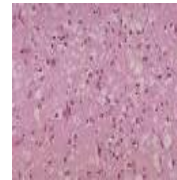
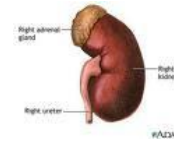
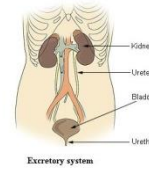
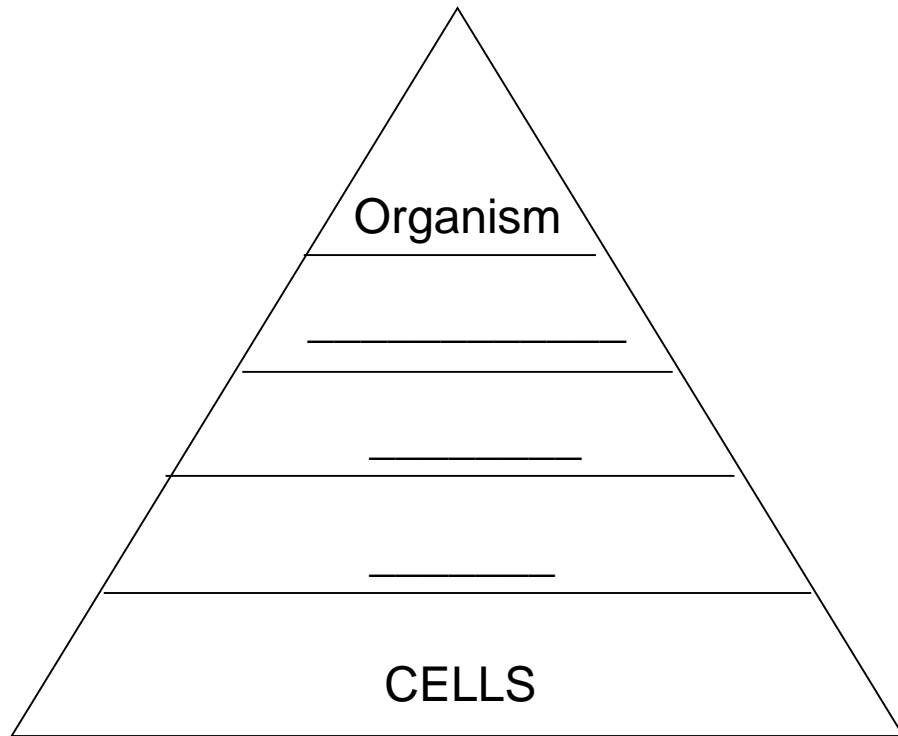
Figure 1



Plant or Animal	Cell Part	Function
	Cell Membrane	Controls movement of materials into and out of cell
	Vacuole	Storage compartment for water and other substances
	Mitochondrion	Releases the chemical energy from food
	Chloroplasts	Produces food for the cell by photosynthesis
	Nucleus	Controls activities of the cell and contains DNA
	Cytoplasm	Fills the cell with a jelly like substance
	Cell Wall	Provides rigid support for the plant cell

Plant & Animal  
Plant & Animal  
Plant & Animal  
Plant  
Plant & Animal  
Plant & Animal  
Plant

# Levels of Organization of Organisms



\_\_\_\_\_ is the organelle that acts as the power factory of the cell.

\_\_\_\_\_ is the theory that states that all organisms are composed of cells.

Organism

Organ System

Organ

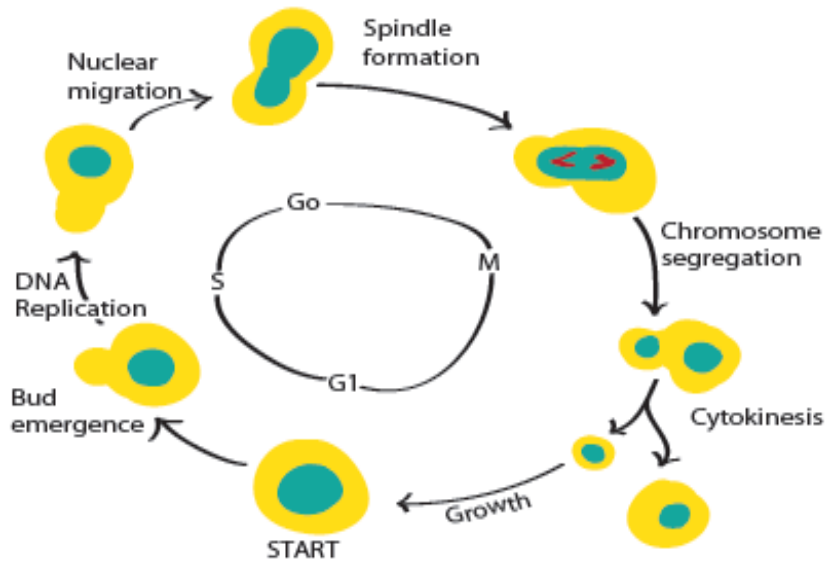
Tissue

Cells

Mitochondrion

Cell Theory

\_\_\_\_\_ is the reproductive process that involves one parent and produces offspring genetically identical to the parent. (Uniform Offspring)



**Examples**

Binary Fusion  
Budding

\_\_\_\_\_ is the reproductive process involving two parents whose genetic material is combined to produce a new organism different from themselves. (Diverse Offspring)



**Examples**

Offspring with mixed traits  
from parents



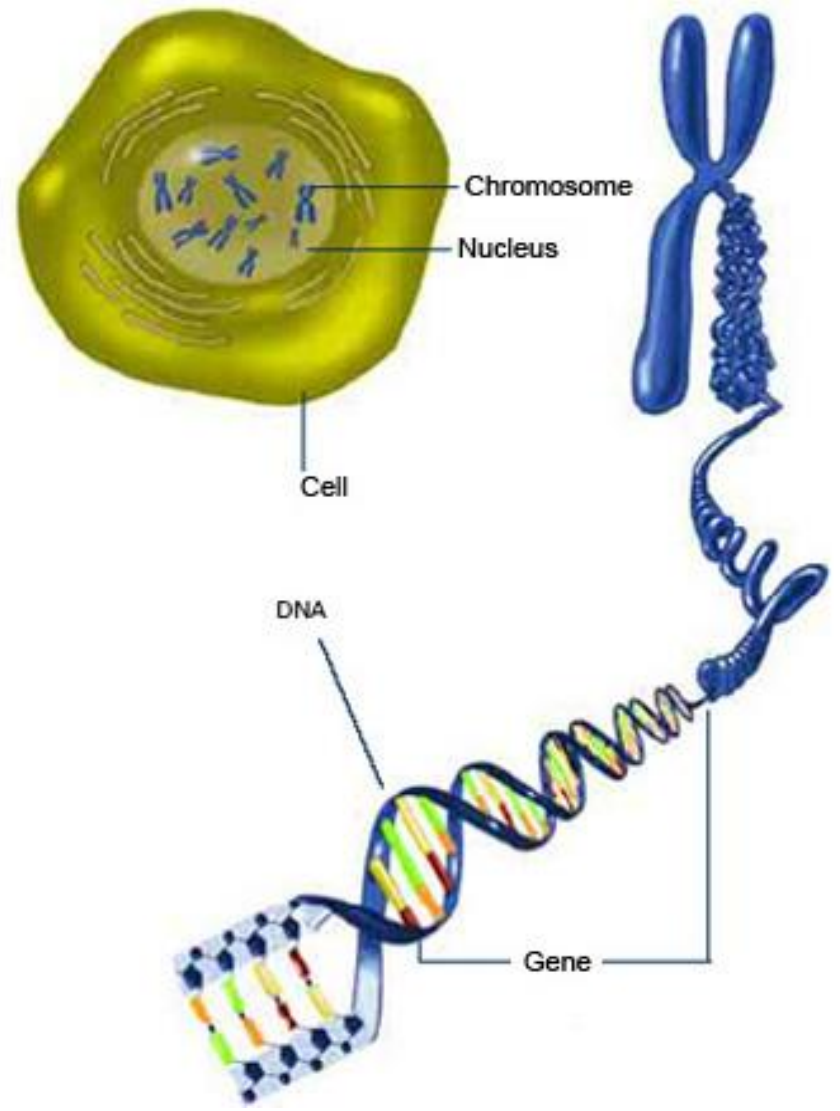
Asexual

Sexual

**DNA is the molecule that contains all of our \_\_\_\_\_ information.**

**DNA is found ON the \_\_\_\_\_**

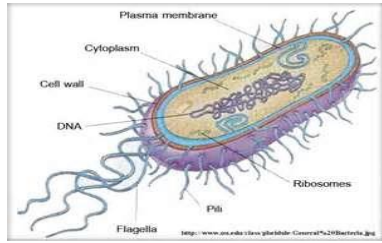
**which are located IN the \_\_\_\_\_ of the cell.**



Genetic

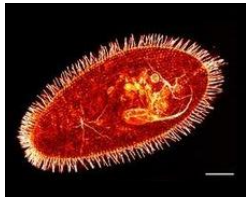
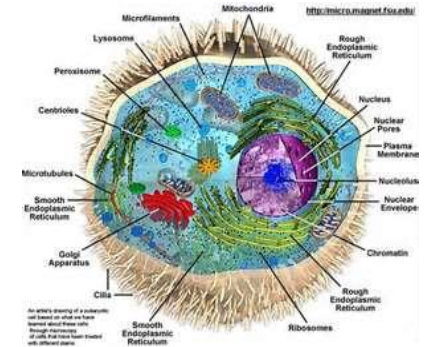
Chromosomes

Nucleus



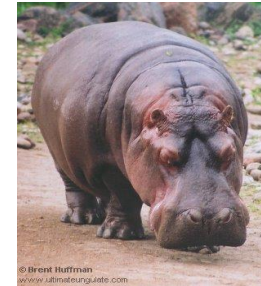
\_\_\_\_\_ an organism that lacks a membrane enclosed nucleus

\_\_\_\_\_ an organism that has a membrane enclosed nucleus



\_\_\_\_\_ An organism made up of one cell

\_\_\_\_\_ An organism made up of more than one cell



\_\_\_\_\_ An organism that is able to make its own food

\_\_\_\_\_ An organism that cannot make its own food



Prokaryote  
Eukaryote  
Unicellular  
Multicellular  
Autotrophic  
Heterotrophic