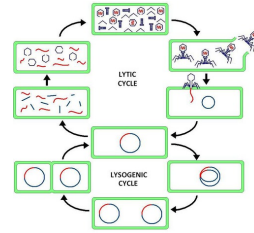
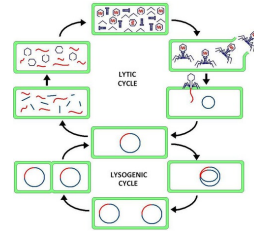


Lytic cycle



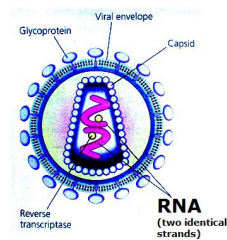
process in which a virus enters a cell, makes a copy of itself, and causes the cell to burst

Lysogenic cycle



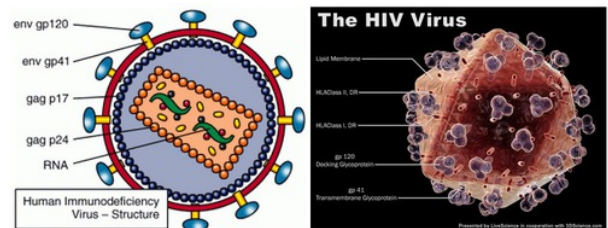
process by which a virus embeds its DNA into the DNA of the host cell and is replicated along with the host cell's DNA

Retrovirus



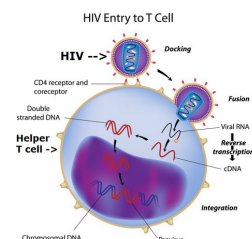
virus that contains RNA, instead of DNA, as its genetic information (ex. HIV)

HIV (Human immunodeficiency virus)



a retrovirus that uses the DNA of white blood cells called helper T cells to replicate; causes the disease known as AIDS

Helper T cell



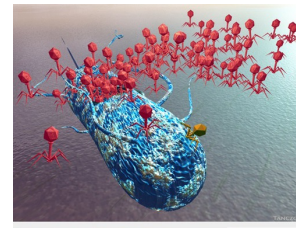
a type of white blood cell, that play an important role in the immune system; HIV attacks these cells

Influenza



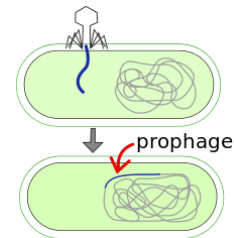
usually referred to as the flu or grippe, this is a highly infectious respiratory disease; also a retrovirus

Bacteriophage



virus that uses the DNA of bacteria to replicate

Prophage



the viral DNA that is embedded in the host cell's DNA

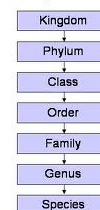
Taxonomy



discipline of classifying organisms and assigning each organism a universally accepted name; father is Carolus Linnaeus

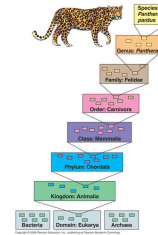
Classification system

Linnaeus's System of Classification



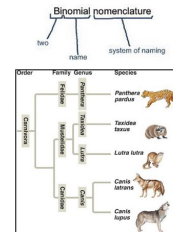
a method to group and categorize organisms based on similarities into taxa

Taxon (plural: taxa)



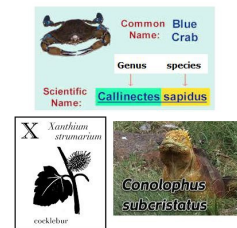
a group or level of organization into which organisms are classified

Binominal nomenclature



classification system developed by Carolus Linnaeus in which each species is assigned a two-part scientific name

Scientific name (Genus species)



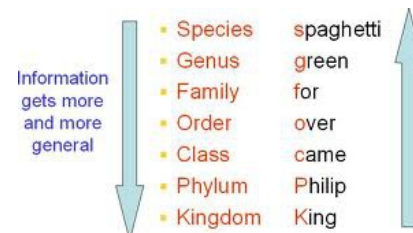
the taxonomic name of an organism that consists of the genus and species

Domain

Domains and Kingdoms						
Domain	Bacteria	Archaea	Eukarya			
Kingdom	Bacteria	Archaea	Protista	Fungi	Plantae	Animalia
Example						
Characteristics	Bacteria are simple unicellular organisms.	Archaea are simple unicellular organisms that often live in extreme environments.	Protists are unicellular and are more complex than bacteria or archaea.	Fungi are unicellular or multicellular and absorb their own food.	Plants are multicellular and make their own food.	Animals are multicellular and take in their food.

the highest level of classification; larger than a kingdom

Kingdom



a group of closely related phylums

Phylum

	HUMAN	OSTRICH
DOMAIN	Eukarya	Eukarya
KINGDOM	Animalia	Animalia
PHYLUM	Chordata	Chordata
CLASS	Mammalia	Aves
ORDER	Primate	Struthioniformes
FAMILY	Hominidae	Struthionidae
GENUS	<i>Homo</i>	<i>Struthio</i>
SPECIES	<i>sapien</i>	<i>camelus</i>

a group of closely related classes

Class

	HUMAN	OSTRICH
DOMAIN	Eukarya	Eukarya
KINGDOM	Animalia	Animalia
PHYLUM	Chordata	Chordata
CLASS	Mammalia	Aves
ORDER	Primate	Struthioniformes
FAMILY	Hominidae	Struthionidae
GENUS	<i>Homo</i>	<i>Struthio</i>
SPECIES	<i>sapien</i>	<i>camelus</i>

a group of closely related orders

Order

	HUMAN	OSTRICH
DOMAIN	Eukarya	Eukarya
KINGDOM	Animalia	Animalia
PHYLUM	Chordata	Chordata
CLASS	Mammalia	Aves
ORDER	Primate	Struthioniformes
FAMILY	Hominidae	Struthionidae
GENUS	<i>Homo</i>	<i>Struthio</i>
SPECIES	<i>sapien</i>	<i>camelus</i>

a group of closely related families

Family

	HUMAN	OSTRICH
DOMAIN	Eukarya	Eukarya
KINGDOM	Animalia	Animalia
PHYLUM	Chordata	Chordata
CLASS	Mammalia	Aves
ORDER	Primate	Struthioniformes
FAMILY	Hominidae	Struthionidae
GENUS	<i>Homo</i>	<i>Struthio</i>
SPECIES	<i>sapien</i>	<i>camelus</i>

a group of closely related genus'

Genus

	HUMAN	OSTRICH
DOMAIN	Eukarya	Eukarya
KINGDOM	Animalia	Animalia
PHYLUM	Chordata	Chordata
CLASS	Mammalia	Aves
ORDER	Primate	Struthioniformes
FAMILY	Hominidae	Struthionidae
GENUS	<i>Homo</i>	<i>Struthio</i>
SPECIES	<i>sapien</i>	<i>camelus</i>

group of closely related species

Species

	HUMAN	OSTRICH
DOMAIN	Eukarya	Eukarya
KINGDOM	Animalia	Animalia
PHYLUM	Chordata	Chordata
CLASS	Mammalia	Aves
ORDER	Primate	Struthioniformes
FAMILY	Hominidae	Struthionidae
GENUS	<i>Homo</i>	<i>Struthio</i>
SPECIES	<i>sapien</i>	<i>camelus</i>

group of similar organisms that can interbreed and produce fertile offspring

Cladogram

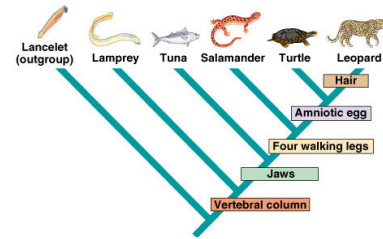
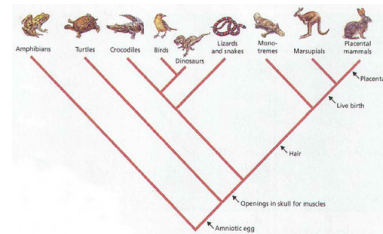


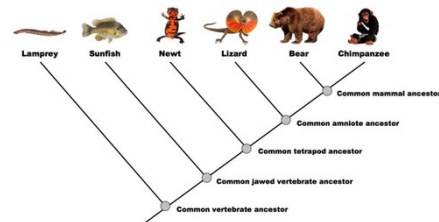
diagram that shows the evolutionary relationships among a group of organisms

Derived characteristics



characteristic that appears in recent parts of a lineage, but not in its older members

Common ancestor



the most recent ancestral form or species from which two different species evolved

Dichotomous key

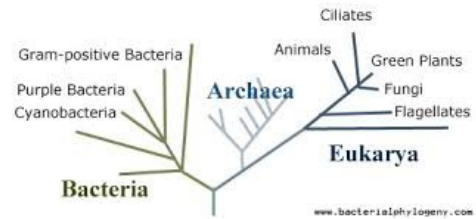
Key to Writing Implements

1. Writes with ink.....go to 2
1. Writes with graphite.....go to 4
2. Writing tip is metal.....go to 3
2. Writing tip is felt.....marker
3. Writing tip contains a ball.....ball point pen
3. Writing tip does not contain a ball...calligraphy pen
4. Body is made of wood.....regular pencil
4. Body is not made of wood.....mechanical

Figure 2

a tool that allows the user to determine the identity of organisms consisting of a series of choices that lead the user to the correct name of a given item

Domain Bacteria



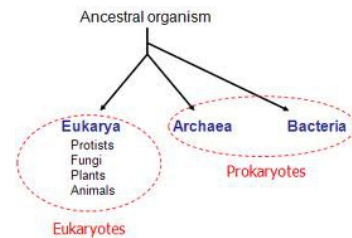
includes Kingdom Eubacteria
(prokaryotes)

Domain Archea

Eukarya	Archaea	Bacteria
Larger, more complex cells, each with a nucleus inside a membrane and other membrane-bound structures.	Tiny, tough, ancient prokaryotes with no nucleus. Many are extremeophiles.	True bacteria. Prokaryotes -- small ancient cells with no nucleus.
Three Domains		

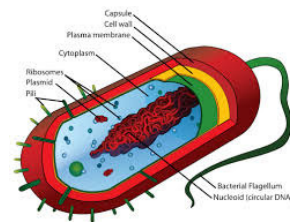
includes Kingdom Archeabacteria
(prokaryotes)

Domain Eukarya



includes Kingdoms Protista, Fungi,
Plantae and Animalia (eukaryotes)

Kingdom Eubacteria



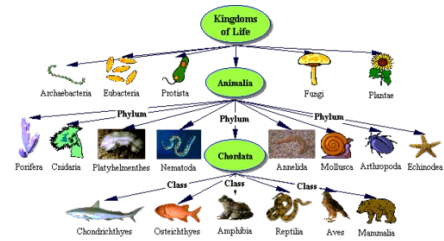
a kingdom of prokaryotic organisms that contains mostly free-living and common bacteria; classified under Domain Bacteria

Kingdom Archeabacteria



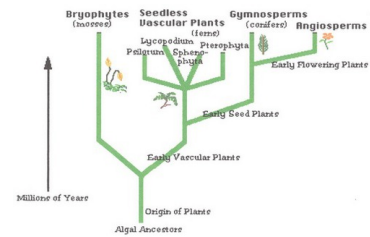
a kingdom of prokaryotic organisms that contains mostly bacteria that are limited to extreme environments; classified under Domain Archea

Kingdom Animalia



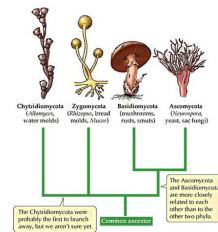
a kingdom a of multicellular, eukaryotic organisms that are free-moving, and lack cell walls; classified under Domain Eukarya

Kingdom Plantae



a kingdom a of multicellular, eukaryotic organisms that have a cell wall made of cellulose; classified under Domain Eukarya

Kingdom Fungi



a kingdom a of multicellular, eukaryotic organisms, such as mushrooms and molds, that have a cell wall containing chitin; classified under Domain Eukarya

Kingdom Protista



a kingdom of a variety of eukaryotic unicellular, colonial, and multicellular organisms, such as ameoba, euglena, paramecium, protozoans, algae, etc.; classified under Domain Eukarya