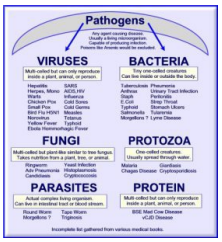
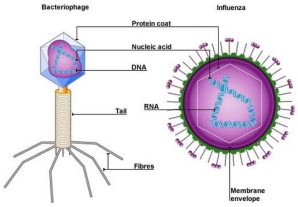
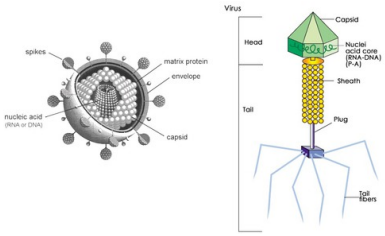
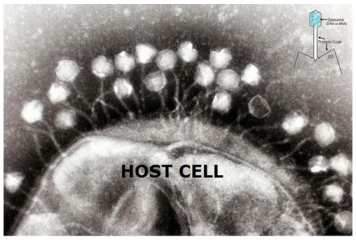
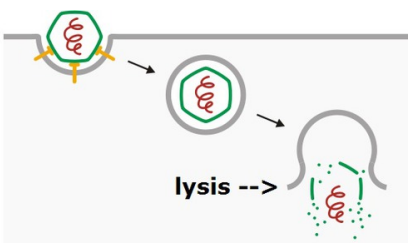
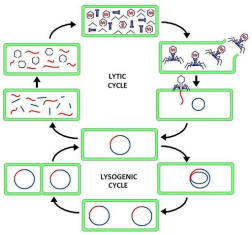
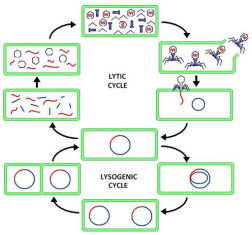
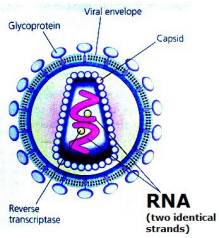
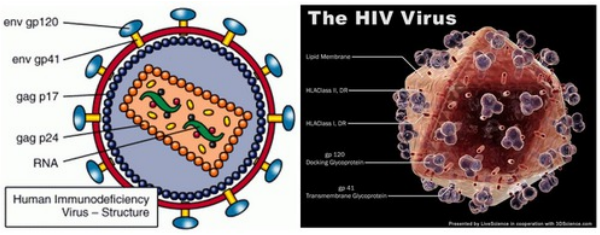
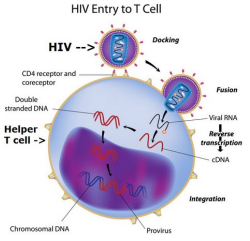
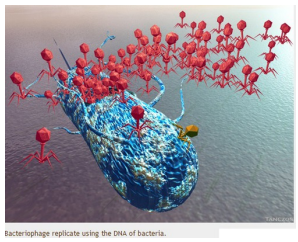
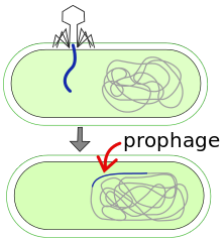
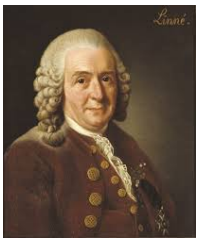
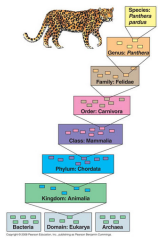
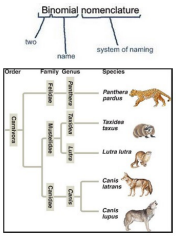
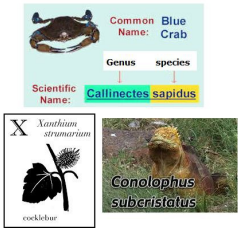
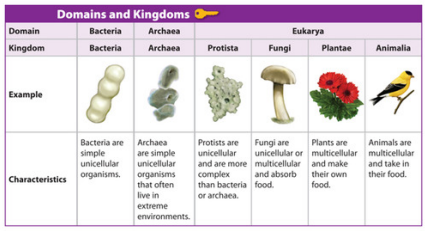
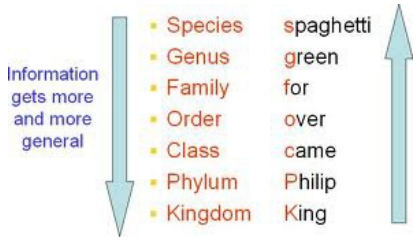
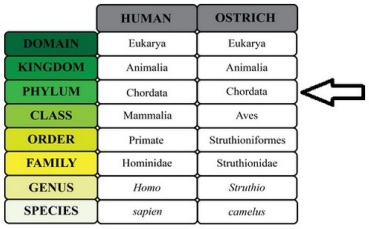
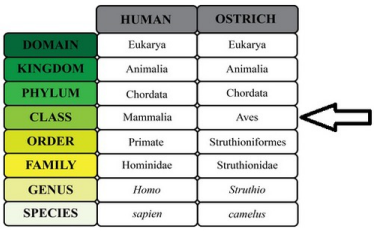
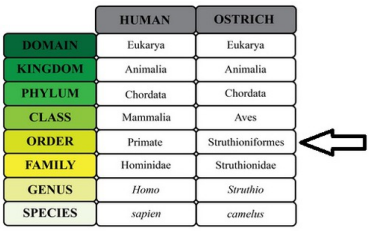
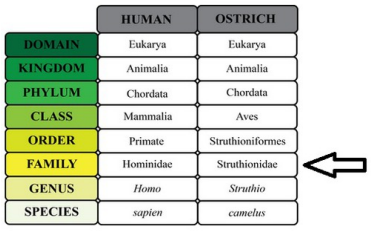
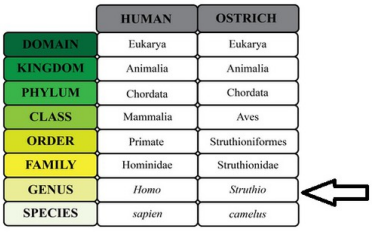
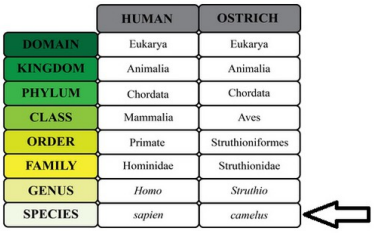
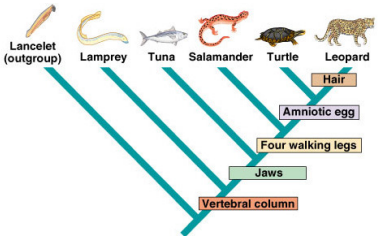
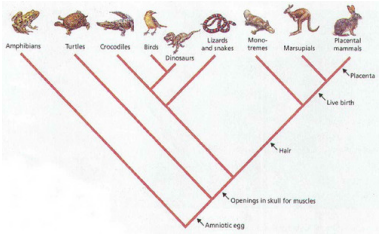
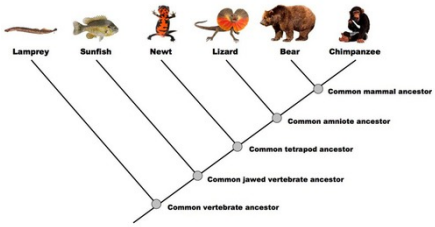
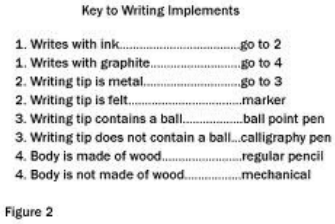
Pathogen	 disease-causing agent
Virus	 particle made up of nucleic acid, protein, and in some cases lipids, that can replicate only by infecting living cells; antibiotics do NOT work on these
Capsid	 outer protein coat of a virus
Host cell	 a cell that harbors foreign molecules, viruses, or microorganisms
Lysis	 the breaking down of a cell

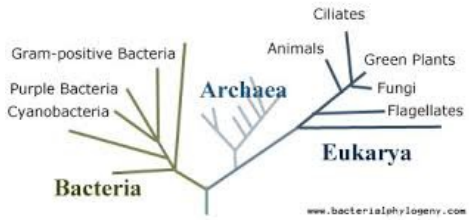
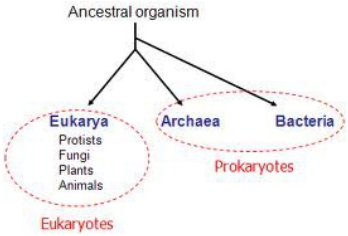
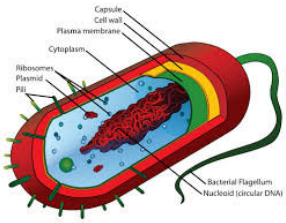
Lytic cycle	 process in which a virus enters a cell, makes a copy of itself, and causes the cell to burst
Lysogenic cycle	 process by which a virus embeds its DNA into the DNA of the host cell and is replicated along with the host cell's DNA
Retrovirus	 virus that contains RNA, instead of DNA, as its 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

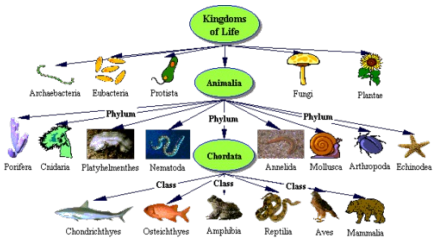
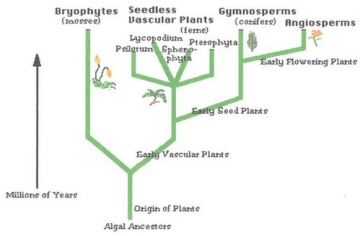
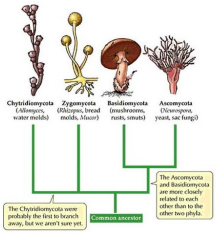
Influenza	 usually referred to as the flu or grippe, this is a highly infectious respiratory disease; also a retrovirus
Bacteriophage	 virus that uses the DNA of bacteria to replicate
Prophage	 the viral DNA that is embedded in the host cell's DNA
Taxomony	 discipline of classifying organisms and assigning each organism a universally accepted name; father is Carolus Linneaus
Classification system	 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	 the highest level of classification; larger than a kingdom
Kingdom	 a group of closely related phylums

Phylum	 a group of closely related classes
Class	 a group of closely related orders
Order	 a group of closely related families
Family	 a group of closely related genus'
Genus	 group of closely related species

Species	 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	 Figure 2 a tool that allows the user to determine the identity of organims 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	 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, paramecieum, protozoans, algae, etc.; classified under Domain Eukarya