Antibiotic -- a type of antimicrobial substance active against bacteria **Archae-bacteria** -- microorganisms that are similar to bacteria in size and simplicity of structure but radically different in molecular organization

Bacilli -- a taxonomic class of bacteria that includes two orders, Bacillales and Lactobacillales

Bacillus anthracis -- the cause of anthrax

Bacteria – ubiquitous one-celled organisms involved in fermentation, putrefaction, infectious diseases, and nitrogen fixation

Bacteriophage -- a virus that infects and replicates within bacteria and archaea

Binary fission -- the process that bacteria use to carry out cell division

Capsid – structure that encloses a virus' nucleic acid

Chemo-heterotroph -- an organism that derives its energy from chemicals, and needs to consume other organisms in order to live

Class -- A taxonomic group comprised of organisms that share a common attribute **Cocci** – spherical bacteria

Conjugation – temporary union of two bacteria

Coronavirus -- when viewed under an electron microscopic each virion in this type of virus is surrounded by a halo

Domain -- the highest taxonomic rank of organisms

Endospore – spore formed within a cell of a rod-shaped organism

Eubacteria -- single-celled prokaryotic microorganisms that have a range of characteristics and are found in various conditions throughout all parts of the world. All types of bacteria fall under this title, except for archaebacteria

Eykaryote -- <u>organisms</u> whose <u>cells</u> have a <u>nucleus</u> enclosed within a <u>nuclear</u> <u>envelope</u>

Family -- A taxonomic rank in the classification of organisms between genus and order

Flagella -- organ of locomotion in protozoa

Genus -- as a taxonomic rank comprised of species with common attributes **Gram staining** -- a widely used microbiological staining technique that aids in the identification and characterization of bacteria

Influenza -- an infectious disease caused by an influenza virus

Kingdom -- the rank just below domain

Linnaean Nomenclature -- the particular form of <u>biological classification</u> (taxonomy) set up by <u>Carl Linnaeus</u>

Lysogenic cycle -- method by which a virus can replicate its DNA using a host cell **Lytic cycle** -- the "reproductive cycle" of the bacteriophage

Order -- a taxonomic rank used **in** classifying organisms, generally below the class, and comprised of families sharing a set of similar nature or character

Photo-heterotroph -- organism that use light for energy, but cannot use carbon dioxide as their sole carbon source

Phylum – primary subdivision of a taxonomic kingdom

Prokaryote – any cellular organism that has no nuclear membrane, no organelles in the cytoplasm except ribosomes, and has its genetic material in the form of single continuous strands forming coils or loops

Retrovirus – family that includes the AIDS virus

Species – major subdivision of a genus

Spirilla -- a group of bacteria characterized by a corkscrew (spiral) appearance **Spore formation** -- method of asexual reproduction which is found in non flowering plants such as fungi and bacteria

Taxonomy – the science of classifying organisms

Vaccine -- a biological preparation that provides active acquired immunity to a particular infectious disease

Virus -- infectious agent of small size and simple composition that can multiply only in living cells of animals, plants, or bacteria