BIOL 1114: Equivalent Terms and a Few Warnings

- Inhibits, blocks, prevents normal function
- Mimics, acts the same as
- Enhances, improves, makes greater
- Consume, eat, use up, acquire, take in (e.g., oxygen, carbon dioxide, glucose)
  *When organisms do these things, they are often getting, acquiring, using reactants/raw materials/substrates.
  *Sometimes as a part of consuming (or after consuming) a substance, they break it down/take it apart.
    e.g., glucose is broken down during cellular respiration,
    e.g., water is split in photosynthesis.
  *When organisms consume oxygen, the oxygen does not disappear; it is not destroyed.
    We mean that the oxygen is taken into the body, into cells, and is utilized to do something,
    e.g., there is oxygen used in synthesizing (making) DNA and RNA,
    e.g., some oxygen combines with (reacts with) carbon to make carbon dioxide.
- Produce, synthesize, put together: all these mean making something,
  e.g., proteins are synthesized on ribosomes,
  e.g., mRNA is made in the nucleus,
  e.g., oxygen production in photosynthesis results from splitting water (water is a reactant in the process).
    That means that the water molecule is split apart with the energy acquired from the sun and two atoms of oxygen are put together to make $O_2$.
  *In production, a product is produced.
- Provide, make available,
  e.g., oxygen produced by algae in photosynthesis is provided to fish for cellular respiration
- Susceptible: can acquire/get an infectious disease,
  e.g., people who have not been exposed to measles virus or been immunized against it are susceptible to measles, that is, they can get the disease
- Resistance/resistant: unlikely to be affected by something/able to withstand its effects,
  e.g., cattle that have thick skins are resistant to tick feeding,
  e.g., people whose lungs are very healthy (in very good condition) tend to be resistant to infection by the bacterium that causes TB,
  e.g., a parasite that causes malaria and is quinine-resistant is unaffected by quinine,
  e.g., bacteria that are antibiotic-resistant are unlikely to be affected by a particular antibiotic (Note that antibiotics are chemicals, not antibodies or antigens)
- Immune: not susceptible to an infectious disease agent,
  e.g., someone vaccinated against the polio virus is probably immune to that virus,
  e.g., someone who has already had measles is probably immune to that virus.
  *Note that in this course we discuss a very small part of the immune response of animals with backbones (vertebrates).
  *Note also that we do not refer to someone who is unaffected by a toxin as “immune to the toxin”.

e.g. = for example