Fundamentals Quarter 4 Study Guide

* Blood Pressure
  + Where is it measured?
  + What is systolic and diastolic?
* Natural openings in our body
  + Where can pathogens enter?
* Viruses
  + What do they do in our cells?
  + What types of diseases can they cause?
  + What is a pathogen?
  + What cells remember a virus to fight off in the future?
  + What is our largest non-specific defense barrier?
  + What is a vaccination?
  + Do antibiotics work on viruses? Why or why not?
  + What are the differences between viruses and bacteria?
* Blood types
  + What are the four blood types?
  + Who can donate to who?
  + Universal Donor? Universal Recipient?
* What are histamines? What medication is used to treat the effects of histamines?
* What is an autoimmune disease? Give some examples
* Label a diagram of the digestive system
  + Know the pathway that food takes through the digestive tract
  + Where are nutrients absorbed into the bloodstream?
  + Where is water absorbed?
  + What organs are involved in the digestive system but food does not pass through?
  + Where does food spend most of its time?
* Where does cellular respiration happen?
  + What does it produce?
  + Know the equations for cellular respiration and photosynthesis
* DNA
  + Shape of the molecule
  + Mutations
  + Nitrogen bases
  + DNA code produces what in the end?
  + What is a codon?
  + Be able to match up sample DNA strand with their complimentary bases
  + Replication, Transcription, Translation
  + What parts make up proteins?
  + What are the differences between DNA and RNA?
* Genetics
  + What is a genotype? Phenotype?
  + What is homozygous dominant? Homozygous recessive? Heterozygous?
  + Be able to interpret and set up punnett squares
  + Sex chromosomes for male and female?