ANATOMY AND PHYSIOLOGY MIDTERM REVIEW

* Characteristics of most living organisms
* The waste products of metabolism
* What are all of the chemical and physical changes taking place in the body
* Define anatomy and the different divisions
  + Gross, surface, regional, systemic, etc.
  + Microscopic
* What is the study of structures using special imaging?
* Define physiology
* Appendicular skeleton, axial skeleton
* Level of organizations
* Why are cells considered the smallest units of living organisms?
* **Study the general functions of all 12 organ systems.**
* Study planes and sections and their terminologies
* Abdominopelvic quadrant, regions
* Directional terms
* Body cavities
  + Ventral
  + Dorsal
  + Anterior
  + Posterior
* Atoms
  + Particles- protons, electron, neutrons (charges, atomic mass, atomic weight)
* Principal elements of the human body
* Most abundant element in the human body
* What does the mass number represent
* Matter containing two atoms of the same element
* Different chemical bonds
* Different types of energy- kinetic, potential,
* Decomposition reaction, synthesis reactions (dehydration, anabolism), exchange reaction
* Function of proteins
* Difference between organic and inorganic compounds
* A DNA nucleotide consists of
* pH scale and concentration
* Concepts of the cell theory
* Macromolecules- AKA organic molecules (Carbohydrates, Lipids, Proteins, Nucleic acids)
* Components and function of cell.
* Movement molecules across the membrane- Diffusion, osmosis, carrier-madited and vesicular transport, active, passive transport.
* Types of solutions
* Identify the macromolecule type based on the function.
* DNA Replication, Transcription, translation, protein synthesis.
* Codon, anticodons, triplets, A,G,T,C pairing, etc.
* The term "benign"
* Synthesis of most ATP
* The 4 main types of tissue
* Classification of tissues, function, etc.
* Mechanisms of glandular secretion, types of secretion, Merocrine, apocrine, holocrine.
* A mechanism in which two substances move in opposite directions across the cell membranes.
* 2 process needed for the repair of tissue.
* Neural tissue basic types of cells
* The tissue under the skin is called the
* The layers of the epidermis
* Where is thick skin found?
* Functions of the skin
* How does the RNA molecule differ from a DNA molecule?
* Identify histological slides ( nucleus, tissue)
* Label and name the anatomical the planes
* Skin Diagram all the parts