***A&P First Semester Final Review Guide***

Chapter 1 - Intro

* Definitions of Anatomy and Physiology
* What words mean the study of cells and tissues?
* Know the levels of organization from atom, molecule… organism
* Practice anatomical directions and terms. See figure p. 18. Know what anatomical positions is and what it is called to be lying face up in a bed.
* Define and give examples of homeostasis, positive feedback and negative feedback.
* Know what sections divide the body. Figure p. 20

Chapter 3 - Cell

* Review transcription and translation. View p. 81 and 82 for figures
* Where in a cell is ATP made? Where is DNA and what is it made of?
* What the functions of the main organelles: golgi body, mitochondria, Endoplasmic reticulum, ribosomes and nucleus
* What is the main functional unit of the human body?
* Explain what it is meant by hypo/hyper/isotonic solutions
* What is the cell membrane made of and what role do inter-membrane proteins place in regulating what goes in and out of the cell? What are the 2 types of transport?
* List the steps of the cell cycle and what happens at each stage.

Chapter 4 - Tissues

* Lis the 4 tissues types
* What main cel types are found in cartilage, bone, and fat?
* Name the 3 types of epithelial tissue (shapes)? What are the functions of epithelial tissues?
* List the 3 types of connective tissues
* What structure holds muscle to bone? What holds bone to bone?

Chapter 5 - Skin

* Describe the function of melanin in giving skin its color. What happens in Albinos?
* What are some examples of accessory structures that are part of your skin, like nails?
* List the functions of the integumentary system.
* What do arrector pili muscles do?

Chapter 6-9

* Review the anatomy of a bone p.183
* What are the functions of the skeletal system?
* What is the name of mature bone cells?
* Review the 6 types of bones
* Name the 3 parts of the sternum and where does it join at the clavicle?
* How many ribs are there and what different kinds are there?
* How many vertebrae are there and what different kinds are there?
* Review the bones of the skull, especially the nose area.
* Draw and label a vertebrae, study the 3 parts p. 225
* Study the foot bones, pelvis and know the difference between male and female skeletons.
* What is the largest bone?
* How are axial and appendicular skeletons different?
* Review the 6 types of joints, where they are located and which permits the most movement.
* Distinguish between diarthroses, synarthroses, and amphiarthoses.

Chapter 12 – Nervous System (extra credit on review and final)

* Know the Central Nervous system, peripheral nervous system and how afferent and efferent divisions function.
* What is an action potential considered an all or non-response?
* What does myelin provide for a neuron?
* Study the anatomy of a neuron and be able to elaborate on the functions of each part.

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