

## **Honors Physiology**

### **First Semester**

#### **Final Review**

Directions: For the semester 1 final, you will also complete a **partner multiple choice test**, with approximately 20-30 questions from each major unit. Use the information below to guide your studying for this portion of the final. We encourage you to take notes, use old packets, etc. however completion of this study guide is for your own benefit (no points will be provided!) You will choose your partner for this portion of the test!

#### **Unit 1, Chapter 1: Intro to Anatomy/Physiology**

Identify the major body cavities, body regions, and body planes/cuts.

List the functions of the body systems, and the major organs included in those systems.

Contrast positive and negative feedback, and give examples of each.

Define and give examples of regional and directional terms (cephalic, anterior, distal, etc.).

Define anatomical position and principle of complementarity.

#### **Unit 2, Chapter 4: Histology**

Identify slides or pictures of the major body tissue types (stratified squamous, cardiac muscle....).

Match tissue types with their functions.

Compare and contrast the different types of cartilage.

Compare and contrast the different types of muscle.

#### **Unit 3, Chapter 5: Integumentary System**

Identify and compare layers of the epidermis, dermis, and hypodermis. Know their order!

Compare and contrast types of burns and types of skin cancers.

Compare different types of glands found in skin (ceruminous, sweat...).

#### **Unit 4, Chapters 6-8: The Skeletal System**

Identify and give examples of bone types (long, short....).

Label parts of a long bone.

Identify and compare fracture types.

Compare red and yellow marrow.

Identify tissue and cell types found in bone (osteoclast, osseous tissue, hyaline cartilage...).

Identify and classify major joints in body (sutures, synchondroses, hinge, etc.).

List major functions of skeletal system.

Describe movements of joints (flexion, circumduction, etc.).

Identify major bones in body.

#### **Unit 5, Chapter 9-10: The Muscular System**

Briefly describe an action potential in a muscle cell, stimulated by signals sent from the nervous system.

Explain the 3 ways in which our body creates ATP and the differences in usage of these energy stores.

Identify microscopic anatomy of muscle (myofibril, sarcomere, myosin, etc.).

Explain the sliding filament theory of contraction.

Compare and contrast the three muscle types.

Identify major muscles in body.