**Skeletal, Muscular, Respiratory, Digestive and Urinary Systems Study Guide**

List the order of organization in the human body. - Cells, Tissues, Organs, and Systems

Define homeostasis - A state of balance

List the three main functions of the skeletal system.

1. Serves as an anchor for all the body’s movement
2. Provides support
3. Protects soft organs inside of the body

List the three main parts of bone and the functions of each.

1. Compact – hard layer of outside bone
2. Spongy – spongy, but lightweight
3. Marrow – produces red blood cells

List the two parts of the skeletal system and all of their components.

1. Axial – skull, spinal column, and ribs
2. Appendicular – shoulders, hips, arms and legs

Define:

1. Tendon – tissue that attach muscle to bone
2. Ligament - tissue that attach bone to bone
3. Cartilage – cushion between your bones that acts as a shock absorber

List the three major functions of the muscular system.

1. Movement
2. Maintain body temperature
3. Maintain posture

List the three types of muscle, tell where they are found, and tell whether they are voluntary or involuntary.

1. Skeletal – Voluntary
2. Cardiac – Involuntary
3. Smooth - Involuntary

What is produced when muscles contract? heat

List at least 3 functions of the respiratory system:

1. Remove carbon dioxide and other wastes from your body and breathe oxygen.
2. Remove Water
3. Allow for speech and emotion

Define:

Larynx- a 2 inch tube shaped organ at the top of the trachea responsible for speech

Trachea - Your windpipe

Bronchial Tubes – carries air from the trachea into the lungs

Explain why it’s important that the alveoli are only 1 cell thick: so oxygen and carbon dioxide can pass between the blood and the rest of the body.

What are the 3 functions of the Digestive System.

1. Break down food into smaller pieces
2. Remove Solid Waste
3. To absorb nutrients in the blood

How is chewing both chemical and physical? Chemical is food being broken down by saliva. Physical is food being broken down by the teeth in small pieces.

Define:

Peristalsis - wavelike contractions of smooth muscles

Liver- produces bile

Large Intestine- Most water and remaining nutrients are removed and the remaining material is solid waste

Vili- allows for absorption of nutrients in the digestive system

Bile - breaks down fat

What is the function of the urinary system: to remove liquid waste

Define:

Kidney- filters wastes and toxins from your urine

Urethra- voluntary muscles at the end of the bladder allow a person to hold the organ closed until urination

Bladder - to store urine