

BODY SYSTEMS RESEARCH QUESTIONS

1. Nervous System

1. Describe the basic structure and function of the nervous system.
2. Describe the structure of the neuron and explain how it operates. (diagram)
3. List the parts and discuss the functions of the Central Nervous System.
Discuss the structure and control centers of the brain.
4. Explain how a simple nerve impulse travels.
5. Explain what occurs during a reflex (diagram)
6. What are some problems or diseases that people may have with the nervous system?
7. Compare and contrast the Central and Peripheral Nervous Systems.
8. Vocabulary to use: Central Nervous System, Peripheral Nervous System, Neuron, Dendrite, Cell body, Sensory Nerve, Motor Nerve, Reflex, Brain, Cerebellum, Medulla, Spinal Cord.

2. Excretory System

1. Define excretion
2. Distinguish between the excretory and urinary systems
3. Describe the functions of the lungs, skin and kidneys in the excretory process.
4. Describe the structure of the kidney and its parts. (include diagram)
5. Explain the importance for the kidneys to filter the blood supply.
6. What are some problems or diseases that people may have with the excretory system?
7. Vocabulary to use: Excretion, Kidney, Nephron, Ureter, Urethra, Urine, Bladder, Sweat glands, Lungs

3. Respiratory System

1. Identify the structure and function of the parts of the respiratory system. (include diagram)
2. Explain how the ribs and diaphragm help you to breathe.
3. Explain how breathing rate is controlled.
4. Describe what happened between the alveoli and the capillaries.
5. Describe the effects of smoking on respiration.
6. What are some problems or diseases that people may have with the respiratory system?
7. Vocabulary to use: Alveoli, Epiglottis, Trachea, Bronchi, Larynx, Lung, Cilia, Diaphragm, Capillaries

4. Circulatory System

1. List the functions of the human circulatory system.
2. Describe the pathway of blood from the right atrium to the aorta.
3. Locate and label the parts of the heart. (include diagram)
4. Compare the blood on the right side of the heart with the blood on the left side.

5. Describe the components of blood. (red blood cells, white blood cells, platelets, plasma)
6. What are some problems or diseases that people may have with the circulatory system?
7. Vocabulary to use: Aorta, Artery, Capillary, Vein, Ventricle, Vena Cava, Atrium, Valve,

5. Digestive System

1. List the parts of the digestive system and five of their functions. (diagram)
2. Compare mechanical and chemical digestion.
3. Explain where nutrients get digested in the digestive system.
4. How is digested food able to enter our blood stream?
5. What substances do the liver and pancreas produce and explain the function of each organ.
6. What are some problems or diseases that people may have with the digestive system?
7. Vocabulary to use: Digestion, Saliva, Salivary Glands, Epiglottis, Esophagus, Stomach, Liver, Gallbladder, Small Intestine, Large Intestine, Villi

6. Skeletal System

1. Identify 10 major bones in the body. (diagram)
2. State the function of the skeletal system.
3. Describe the major components of bone.
4. Explain four major kinds of joints.
5. Explain how the skeletal system and the circulatory system help each other out.
6. What are some problems or diseases that people may have with the skeletal system?
7. Vocabulary to use: Endoskeleton, Appendicular skeleton, Axial skeleton, Ligaments, Tendon, Periosteum, Marrow, Joint, Cartilage

7. Muscular System

1. Identify the major function of the muscular system
2. List the three types of muscles and give examples of where these muscles would be found in the body. (diagram)
3. How does a muscle contract?
4. Explain how muscles, bones and tendons work together to move.
5. Identify 5 major muscles of the body. (diagram)
6. Explain the function of flexors and extensors.
7. What are some problems or diseases that people may have with the muscular system?
8. Vocabulary to use: Muscle, Skeletal Muscle, Smooth Muscle, Cardiac Muscle, Tendon, Ligament