

Lesson Outline**LESSON 1*****Transport and Defense*****A. The Body's Organization**

1. _____ are groups of organs in the body that work together to form a specific task.
2. Organ systems work together to maintain _____, or steady internal conditions, even when external conditions change.

B. Digestion and Excretion

1. Food is broken down in the body during _____.
 - a. After food enters the mouth, _____ breaks food into smaller parts.
 - b. _____, which contains enzymes, also helps the mouth break down food.
2. When you swallow, food, water, and other liquids move into the _____, a hollow tube that connects the mouth to the stomach.
3. From the stomach, food next moves into the _____, which has functions of digestion and absorption.
4. The _____, or colon, receives digested food that the small intestine did not absorb and absorbs water from the remaining waste material.
5. _____ are the parts of food needed for the body to grow and survive.
 - a. Nutrition labels on food show the amount of each _____ in a food.
 - b. Nutrients in absorbed food contain energy, which is measured in _____.
6. After digestion, substances that are not used are removed by the _____, which includes the lungs, skin, liver, kidneys, bladder, and rectum.

C. Respiration and Circulation

1. The _____ exchanges gases between the body and the environment. _____ enters the body when you inhale. _____ leaves the body when you exhale.

Lesson Outline continued

2. The heart, blood, and blood vessels make up the _____.
 - a. Your _____ is made up of muscle cells that constantly contract and relax, pumping blood to the rest of your body.
 - b. Blood travels through your body in tiny tubes called _____.
 - c. The three main types of blood vessels are arteries, veins, and _____.
3. Blood contains red blood cells, _____, and white blood cells.
 - a. The liquid part of blood is called _____.
 - b. _____ carry oxygen, and _____ protect the body from infection and disease.
 - c. _____ help the body heal when you get a cut.
 - d. Scientists classify the proteins found on the surface of red blood cells into groups called _____, which include, type A, type B, type AB, and type O.
4. The tonsils, the spleen, the thymus, bone marrow, and lymph nodes are part of the _____. The lymphatic system has three main functions—removing excess _____, producing _____, and absorbing and transporting _____.
5. Protection from infection or toxins is called _____.
 - a. The _____ system produces immune cells, and the _____ system transports them throughout the body.
 - b. As part of the first line of defense, _____ and _____ prevent toxins and other substances from entering the body.
 - c. During the second line of defense or the immune response, _____ attack and destroy harmful substances.
 - d. The third line of defense includes _____ and _____, which help fight pathogens that have infected the body.