

CHAPTER 39 RESPIRATION, CIRCULATION, AND EXCRETION

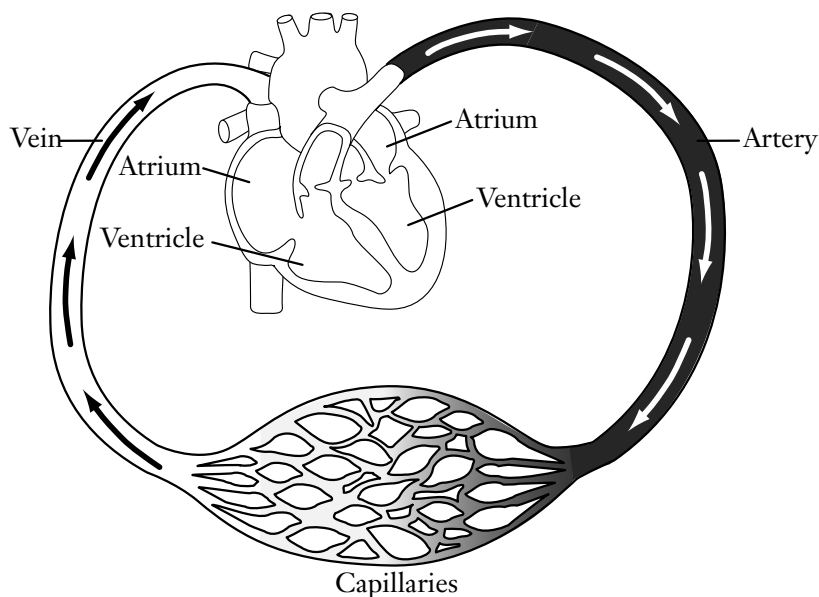
Section 39.2 The Circulatory System

Study the Diagram

Read the paragraphs in the boxes and study the diagram. Then answer the questions.

Your **circulatory system** supplies all the different parts of your body with nutrients and oxygen. It also carries carbon dioxide and other cellular waste products away from the cells. The heart is the most important organ in the circulatory system. It pumps blood through your body all the time, all your life. The blood is carried through vessels that are like a highway system. This system has freeways that carry large numbers of fast-moving blood, smaller roads that carry a steady stream of blood cells, and tiny vessels called **capillaries** that are like neighborhood streets. Some capillaries are so small that only one cell can pass through them at a time. Vessels called **arteries** carry blood away from the heart and lungs. Vessels called **veins** carry the blood from the body back to the heart.

Blood is a tissue because it is made up of several different cell types. **Red blood cells** are the most common, and are like delivery trucks, carrying oxygen to body cells. **White blood cells** are less common, but cruise your network of blood vessels ready to identify and destroy enemy invaders. **Platelets** are sticky fragments that patch damaged vessels by forming clots.



The heart constantly pumps blood to all parts of the body through a network of blood cells.

1. Think about the jobs that red blood cells and white blood cells do. When you get a cold, do you think your body will make more red blood cells or white blood cells? _____
2. Which blood vessels carry blood away from the heart? _____
3. Which blood vessels blood toward the heart? _____