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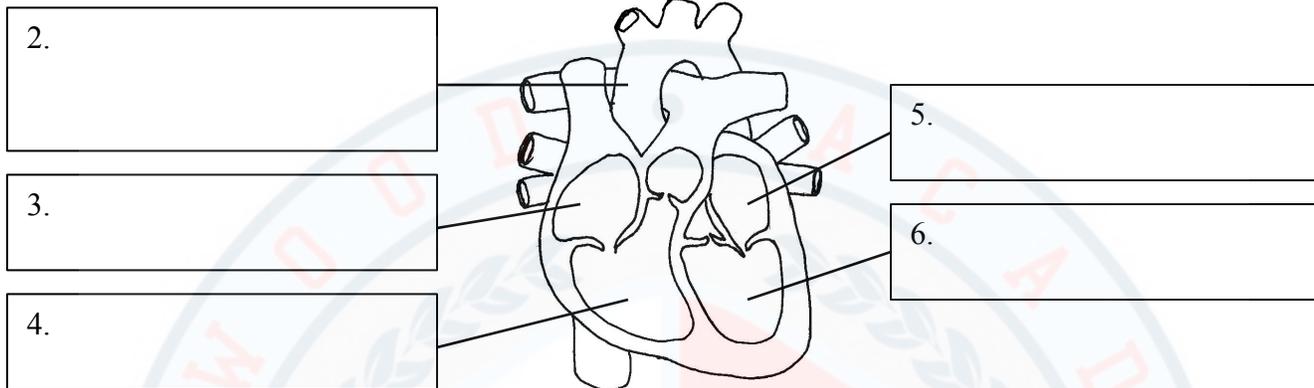
Period: _____

The Circulatory System

Week # _____

Directions: Use p. 948 to answer question 1. For questions 2 – 6, use p. 949 to identify and describe the parts of heart.

1. What is the function of the circulatory system? _____



7. The heart is a muscle that contracts and pushes blood through blood vessels. Why is the wall of the left ventricle thicker, and therefore has more muscle, than the wall of the right ventricle?

Directions: Use p. 952 to answer question 8.

8. As blood flows through the circulatory system, it moves through three types of blood vessels:

Blood Vessels	Function
Arteries	
Capillaries	
Veins	

Directions: Use p. 953 to answer question 9. For 9a and 9b, label and describe what each number represents in a blood pressure reading.

9. Blood pressure is the force of blood in arteries.

$\frac{120}{80}$ ← a. _____

80 ← b. _____

c. What are two ways in which the body regulates blood pressure? _____

Blood

Directions: Read and annotate the passage. Then answer the questions.

Blood is a specialized body fluid. It has four main components: plasma, red blood cells, white blood cells, and platelets. The liquid component of blood is called plasma, a mixture of water, sugar, fat, protein, and salts. The main job of the *plasma* is to transport blood cells throughout your body along with nutrients, waste products, antibodies, proteins, and hormones that help maintain the body's fluid balance. Known for their bright red color and doughnut shape, *red blood cells* are the most abundant cell in the blood. Red blood cells contain a special protein called hemoglobin, which helps carry oxygen from the lungs to the rest of the body and then returns carbon dioxide from the body to the lungs so it can be exhaled. *White blood cells* protect the body from infection. They circulate in the blood so that they can be transported to an area where an infection has developed. Blood clotting is made possible by plasma proteins and cell fragments called *platelets*. Unlike red and white blood cells, platelets are not actually cells but rather small fragments of cells. When platelets come in contact with the edge of a broken blood vessel, their surface becomes sticky, and they cluster around the wound.

1. Complete this chart using the information provided above.

Component of Blood	Function
Plasma	
Red Blood Cells	
White Blood Cells	
Platelets	

2. Identify each component of blood in Figure 1.

- A. _____
- B. _____
- C. _____
- D. _____

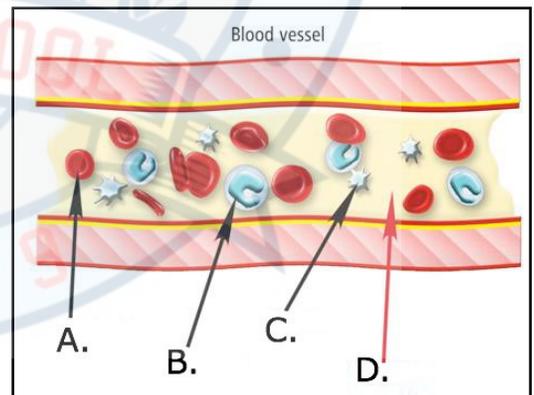


Figure 1

3. A complete blood count (CBC) is a blood test used to detect health problems. If an individual has a high white blood cell count, what could this indicate?

4. If an individual is determined to have a low platelet count, how could negatively impact an individual?
