# THE CIRCULATORY SYSTEM

#### 6.1. Vocabulary

Ex. 1. Solve the rebus puzzle. Translate the words.

1.



#### *Ex.* 2. *Complete the sentences with the given words.*

connect, Capillary, circulator, carries, ventricle, arteries, pulmonary, fine, harmless, veins, atrium, circulation, circuit, circulate, Cardiovascular

The blood travels through the body in a process called \_\_\_\_\_(1), which is essential for life.

The \_\_\_\_\_(2) arteries transport blood from the heart to the lungs to receive oxygen.

Blood vessels \_\_\_\_\_(3) the heart to all parts of the body, ensuring that every cell gets nutrients.

Some small animals can be \_\_\_\_\_(4), but their circulatory systems are still complex and vital.

The \_\_\_\_\_(5) network of capillaries allows for efficient exchange of oxygen and carbon dioxide in tissues.

An electrical \_\_\_\_\_(6) in the heart helps regulate the heartbeat and maintain proper blood flow.

When blood is pumped from the heart, it will \_\_\_\_\_(7) throughout the entire body via arteries and veins.

The \_\_\_\_\_(8) carry deoxygenated blood back to the heart after delivering oxygen to the body's organs.

A \_\_\_\_\_(9) is important in medical devices, helping to manage blood flow during surgeries.

(10) health is crucial, as it affects how well the heart and blood vessels perform together.

The left \_\_\_\_\_(11) is responsible for pumping oxygen-rich blood into the aorta for distribution.

Blood enters the heart through the \_\_\_\_\_(12), where it is then pushed into the ventricle for pumping.

The force of the heart's contractions helps push blood through the (13) and around the body.

An artery \_\_\_\_\_(14) oxygen-rich blood away from the heart to nourish different parts of the body.

(15) walls are so thin that nutrients and waste products easily move in and out of them.

#### 6.2. Grammar

Ex. 1. Translate the sentences into Russian.

- 1. There are 7 classes of invertebrate animals.
- 2. There are 60 seconds in a minute.
- 3. In lower organisms there is no circulatory system.
- 4. There are many, many kinds of microbes.
- 5. There are about ten million kinds of animals and plants on our planet.
- 6. There is a fine network of nerves from the brain to the muscles.
- 7. There is no connection between the two sides of the heart.

8. There are thousands of kinds of bacteria, most of which are harmless to man.

9. There is a rich network of blood vessels all over the body, which acts as a very

efficient transport system.

10. There are more than 600 muscles in the body, over 100 of which are in the face.

# 6.3. Reading

# Ex. 1. Read the text.

The circulatory system is essential for maintaining life. It ensures the proper circulation of blood throughout the body. This system consists of the heart, blood vessels, and blood. The heart is a powerful circulator that drives blood through a complex circuit. It has four chambers: two ventricles and two atriums. Blood is pumped from the heart into arterys, which carry it to various parts of the body.

The circulation can be divided into two main types: pulmonary and systemic. The pulmonary circulation moves blood between the heart and the lungs, where it picks up oxygen. This blood is then moved back to the heart and sent out into the systemic circulation to deliver oxygen to tissues.

Veins return the now deoxygenated blood back to the heart. At the same time, capillary beds connect arterys and veins, allowing for the exchange of oxygen, nutrients, and wastes. These fine blood vessels are crucial for the process. The cardiovascular system's primary function is to keep blood circulating, transporting vital substances and removing harmless waste products.

Overall, the circulatory system is a finely tuned network that consists of various components working together efficiently. This system ensures that every part of the body receives oxygen and nutrients, thanks to the force generated by the heart. This intricate setup highlights the importance of a well-maintained cardiovascular system for overall health.

#### Ex. 2. Answer the questions.

- 1. What are the main components of the circulatory system?
- 2. How many chambers does the heart have, and what are they called?
- 3. What is the difference between pulmonary and systemic circulation?
- 4. How do veins contribute to the circulation of blood in the body?
- 5. What role do capillary beds play in the circulatory system?
- 6. What is the primary function of the cardiovascular system?

7. Why is a well-maintained cardiovascular system important for overall health?

# 6.4. Communication

Ex. 1. Make sentences using the following words.

- 1. heart/pumps/blood
- 2. oxygen/cells/veins
- 3. arteries/blood/heart
- 4. circulatory/vital/survival
- 5. red/oxygen/tissues
- 6. white/fight/infections
- 7. platelets/blood/clot
- 8. heart/veins/arteries
- 9. circulatory/heart/veins
- 10.exercise/improve/health