

## 06.06 Biology Notebook: Cardiovascular System

### **Page 1: The Heart and lungs**

Describe the respiratory system.

Describe the cardiovascular system.

How do the respiratory and cardiovascular systems work together?

**Key Terms:** Jot down terms and definitions that are new to you. You will see them used in the lesson.

### **Page 2: The Cardiovascular System**

What is another name for the cardiovascular system?

What is the cardiovascular system composed of?

Define homeostasis.

What are the four main functions of the cardiovascular system?

- 1.
- 2.
- 3.
- 4.

### **Page 3: The Heart**

Describe the heart and its functions.

What is the septum of the heart and why is it important?

Fill in the blank.

The heart is divided into \_\_\_\_ chambers.

Complete the interactive and fill in the table below.

Parts of the Heart	Description
Aorta	
Pulmonary Artery	
Right Atrium	
Left Atrium	
Superior Vena Cava	
Pulmonary Vein	
Right Ventricle	
Left Ventricle	

#### **Page 4: Blood Vessels**

Describe the function of the three blood vessels in the table below.

Blood Vessels	Function
Capillaries	
Arteries	
Veins	

#### **Page 5: Blood Flow through the Body**

What are the two pathways through the circulatory system?

Describe pulmonary circulation.

Describe systemic circulation.

#### **Page 6: Blood**

Blood is a uniform liquid. Identify four components found in blood.

- 1.
- 2.
- 3.

4.

In the table, define and provide the function for each major component of blood.

Components of Blood	Definition	Function
Plasma		
Red Blood Cells		
White Blood Cells		
Platelets		

Define bone marrow.

Define hemoglobin.

**Page 7: Factors that Affect Blood Flow**

What is blood pressure?

Define each of the following:

- Diastolic pressure-
- Systolic pressure-

How is blood pressure regulated?

What effect do each of the following have on blood pressure:

- Increased blood volume-
- Decreased blood volume-

Describe blood viscosity.

How does temperature affect blood viscosity?

**Page 8: Cardiovascular Disease**

What is cardiovascular disease and how common is it?

Watch the video. Explain in your own words the factors that affect blood flow.

In the table below, describe the cause, symptoms, prevention, and treatment for each type of cardiovascular disease.

<b>Types of Cardiovascular Disease</b>	<b>Cause</b>	<b>Symptom</b>	<b>Prevention</b>	<b>Treatment</b>
High Blood Pressure				
Arterial Disease				
Heart Attack				
Stroke				

**Practice question:**

Which part of the brain is responsible for controlling automatic body functions that occur without you thinking about them, like breathing and vomiting?

- A. Cerebrum
- B. Corpus Callosum
- C. Medulla Oblongata
- D. Temporal Lobe