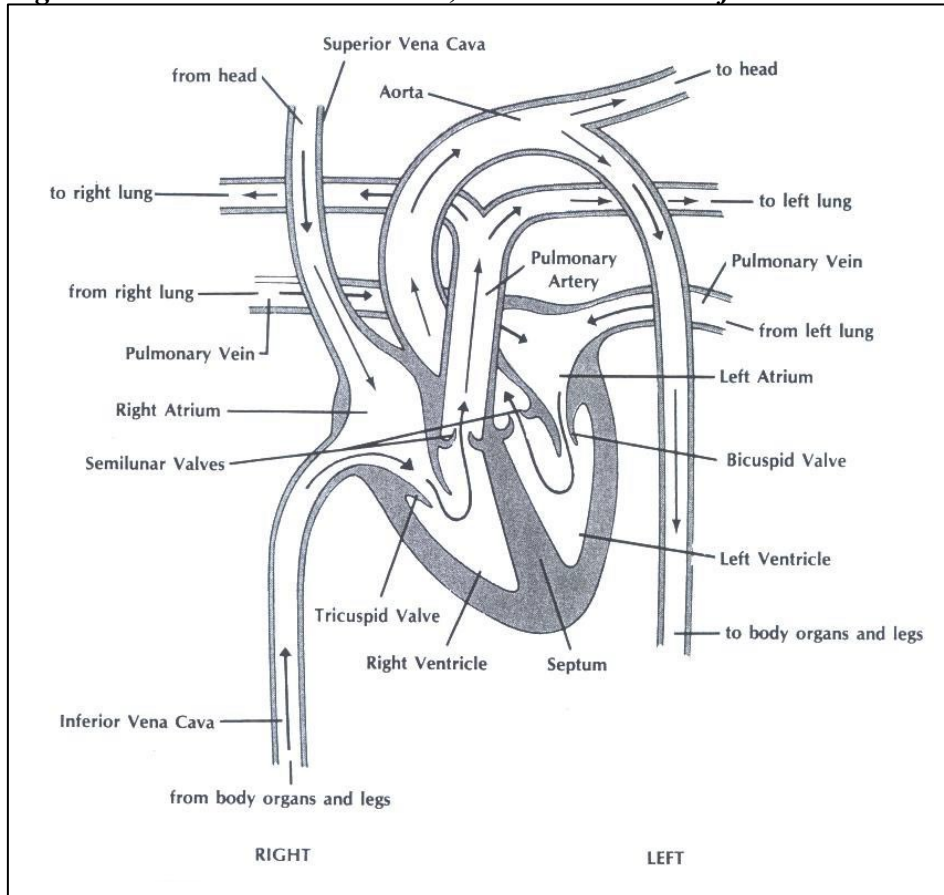


The Human Heart: Anatomy and Circulation

Name: _____ Letter: _____

This worksheet will review some of the concepts covered in class in regards to the human heart. You will need to use your notes, the heart diagram we labeled in class along with Figure 1, below.

Figure 1: Shaded areas are muscle; unshaded areas are filled with blood.



Answer the following:

The two receiving chambers for blood are the right and left atrium

The two discharging chambers for blood are the right, left ventricle

The Septum separates the heart chambers.

Using Figure 1, answer the following:

The **LEFT** side of the heart **RECEIVES** blood **FROM** the lungs

The **RIGHT** side of the heart **RECEIVES** blood **FROM** the body

The **LEFT** side of the heart **PUMPS** blood **TO** the body

The **RIGHT** side of the heart **PUMPS** blood **TO** the lungs

In the table below, fill in whether the heart chamber/blood vessel listed contains oxygenated/deoxygenated blood

Heart Chamber or Blood Vessel	Oxygenated (O) / Deoxygenated (D)
Left Ventricle	O
Right Ventricle	D
Left Atrium	O
Right Atrium	D
Pulmonary Artery	D
Pulmonary Vein	O
Superior vena cava	D
Inferior vena cava	D
Aorta	O

Use the table above along with Figure 1 to answer the following:

1. The blood in the **LEFT** side of the heart is **oxygenated/deoxygenated**. Why is this logical?

Oxygenated because blood is fresh there

2. The blood in the **RIGHT** side of the heart is **oxygenated/deoxygenated**. Why is this logical?

Deoxygenated because it is going to the lungs

3. Blood is changed from an oxygenated state to a deoxygenated state **OR** from a deoxygenated state to an oxygenated state in our circulatory system. Which change occurs in the.....

- Lung capillaries D, O
 - Explain why: pumped to the lung to get oxygenated
- Body capillaries O, D
 - Explain why: pumped from lungs to the rest of the body to get deoxygenated

4. Where does blood go **AFTER** it leaves the.....

Right atrium	<u>Right ventricle</u>	Aorta	<u>Body</u>
Left atrium	<u>left ventricle</u>	Superior vena cava	<u>Right atrium</u>
Right ventricle	<u>pulmonary arteries</u>	Inferior vena cava	<u>Right atrium</u>
Left ventricle	<u>aorta</u>	Lungs	<u>pulmonary vein</u>
Pulmonary veins	<u>left atrium</u>	Organs & legs	<u>Inferior vena cava</u>
Pulmonary arteries	<u>lungs</u>	Head	<u>Superior vena cava</u>

5. Where did the blood come from **BEFORE** it entered the.....

Right atrium	<u>Inferior</u>	Aorta	<u>left ventricle</u>
Left atrium	<u>pulmonary arteries</u>	Superior vena cava	<u>head</u>
Right ventricle	<u>Right atrium</u>	Inferior vena cava	<u>legs</u>
Left ventricle	<u>left atrium</u>	Lungs	<u>pulmonary artery</u>
Pulmonary veins	<u>lungs</u>	Organs & legs	<u>aorta</u>
Pulmonary arteries	<u>Right ventricle</u>	Head	<u>aorta</u>

6. What could happen if a heart valve did not work properly?

The blood would go in the wrong direction and the person will die

7. What is the difference between pulmonary and systemic circulation?

Pulmonary - is the blood goes only to your lungs.
Systemic - is the blood goes to your whole body

body