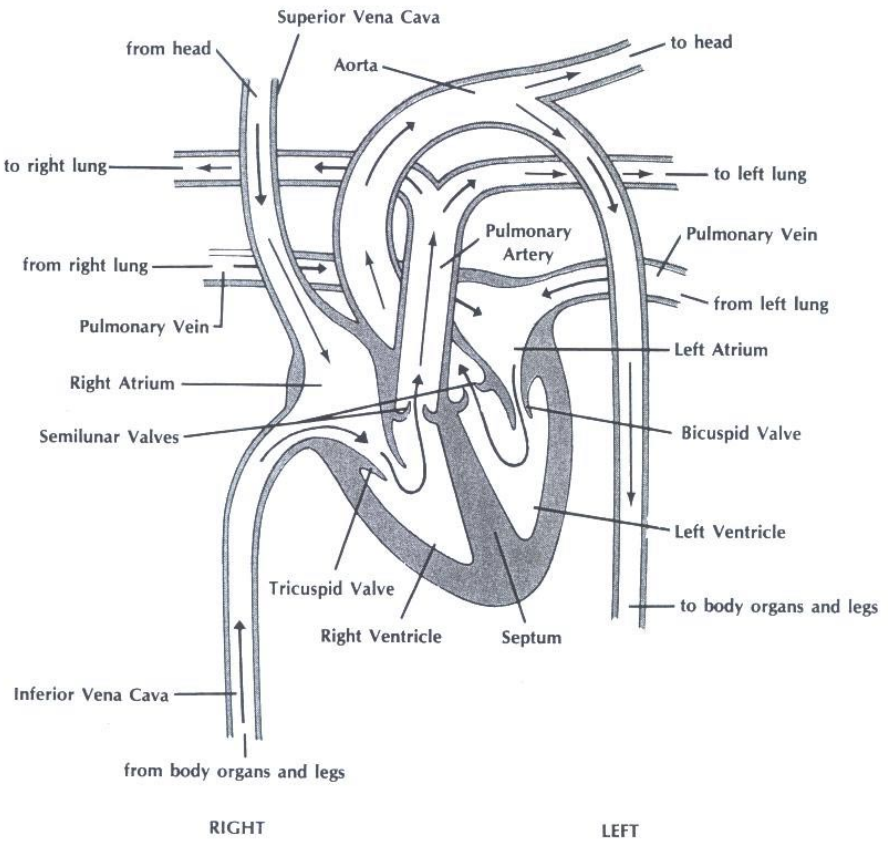
The Human Heart: Anatomy and Circulation Name: _____ Letter: _____

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.

Lab adapted from *Investigating Living Systems Laboratory Manual*; Glencoe

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



Answer the following:

The two receiving chambers for blood are the_____

The two discharging chambers for blood are the_____

The _____ separates the heart chambers.

Using Figure 1, answer the following:

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

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

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

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

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	
Right Ventricle	
Left Atrium	
Right Atrium	
Pulmonary Artery	
Pulmonary Vein	
Superior vena cava	
Inferior vena cava	
Aorta	

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?

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

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 _____
  - Explain why: _____
    _____
    _____

- Body capillaries _____
  - Explain why: _____
    _____
    _____

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

Right atrium _____ Aorta _____

Left atrium _____ Superior vena cava _____

Right ventricle _____ Inferior vena cava _____

Left ventricle _____ Lungs _____

Pulmonary veins _____ Organs & legs _____

Pulmonary arteries _____ Head _____

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

Right atrium _____ Aorta _____

Left atrium _____ Superior vena cava _____

Right ventricle _____ Inferior vena cava _____

Left ventricle _____ Lungs _____

Pulmonary veins _____ Organs & legs _____

Pulmonary arteries _____ Head _____

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

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