

Name: _____

Date: _____

Worksheet 10-2 Circulatory System (Nelson p.88-93)

1. Fill in the blanks below using the key terms provided. Each key term may be used once.

Aorta	arteries	atrium	blood vessels	capillaries
capillary	circulatory system	food	inferior vena cava	
oxygen	superior vena cava	vein	veins	ventricle

How Blood Travels Through the Body

A system of _____ carries the blood through the body. These vessels include _____, _____, and _____. These vessels and the heart make up the _____.

Let's follow that droplet of blood through the blood vessels. When it leaves the left _____ of the heart, it goes into the _____. This vessel is the largest artery in the body. Soon after leaving the heart, this vessel branches, so the droplet could move into the smaller arteries leading to the head or arms. Let's assume this droplet travels down toward the legs. The largest artery divides to carry blood to each leg. This droplet of blood goes into one of the branches. From here, the blood travels in smaller and smaller arteries until it reaches the very end of the big toe. The blood vessel here is so small it cannot be seen by the naked eye. This tiny vessel is a _____. At this point, the droplet nourishes the cells next to this tiny vessel and takes away the waste products.

Now that the blood has given up its _____ and _____, it must return to the heart. It moves into a larger blood vessel. This blood vessel is called a _____. This droplet joins other blood going back into the heart. The blood vessels become larger and larger. Finally, they all join one large blood vessel that receives all blood from the lower part of the body. This blood vessel is called the _____. Another large blood vessel collects blood from the head and arms. This vessel is called the _____. Both then separately enter the right _____ of the heart.

2. What are the **four components** of blood?

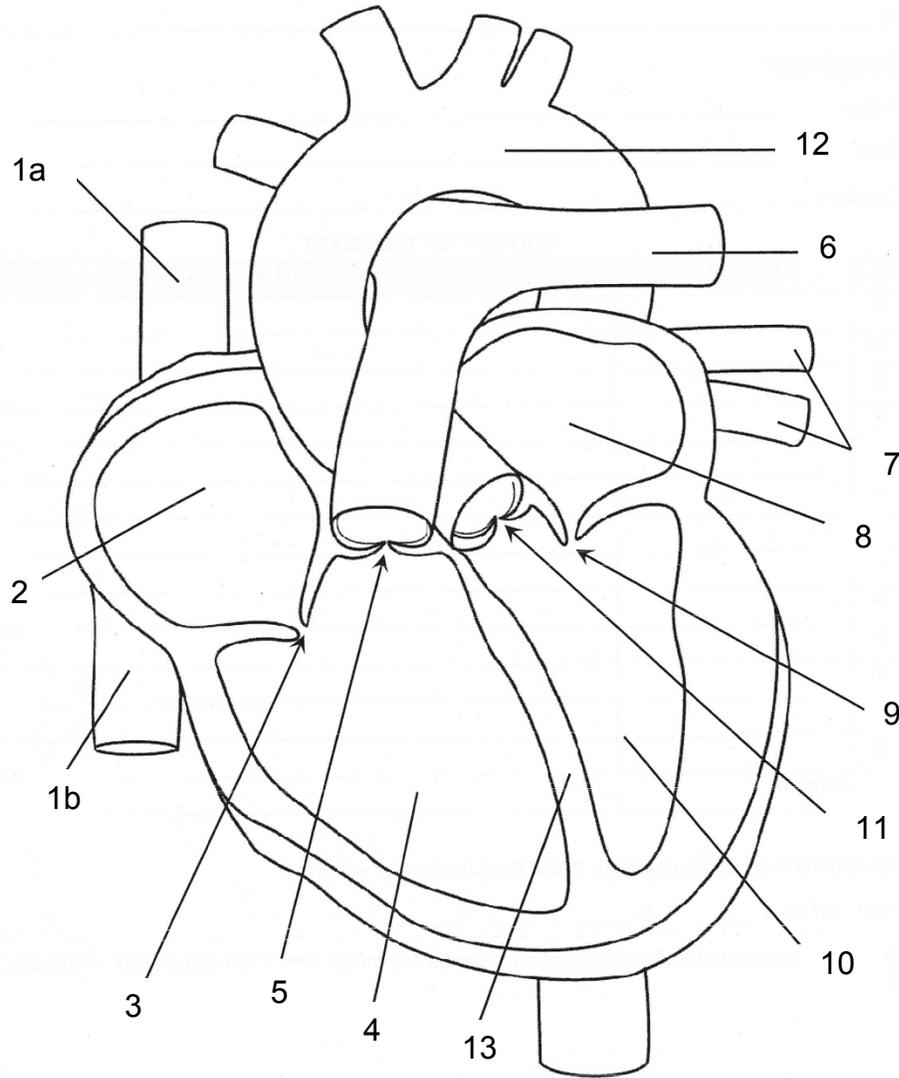
3. (a) **Label** the diagram (fill in the chart below)

- | | | | |
|-------------------------|------------------------------|----------------------|------------------------|
| aorta | inferior vena cava | left atrium | left ventricle |
| pulmonary vein | superior vena cava | right atrium | right ventricle |
| pulmonary artery | right semilunar valve | left AV valve | right AV valve |

(b) Add **arrows** to show the **direction** of the pathway of blood.

(c) **Colour** the parts of the heart that **contain oxygen** – **RED**

(d) **Colour** the parts of the heart that **do not contain oxygen** – **BLUE**



1a		7	
1b		8	
2		9	
3		10	
4		11	
5		12	
6		13	