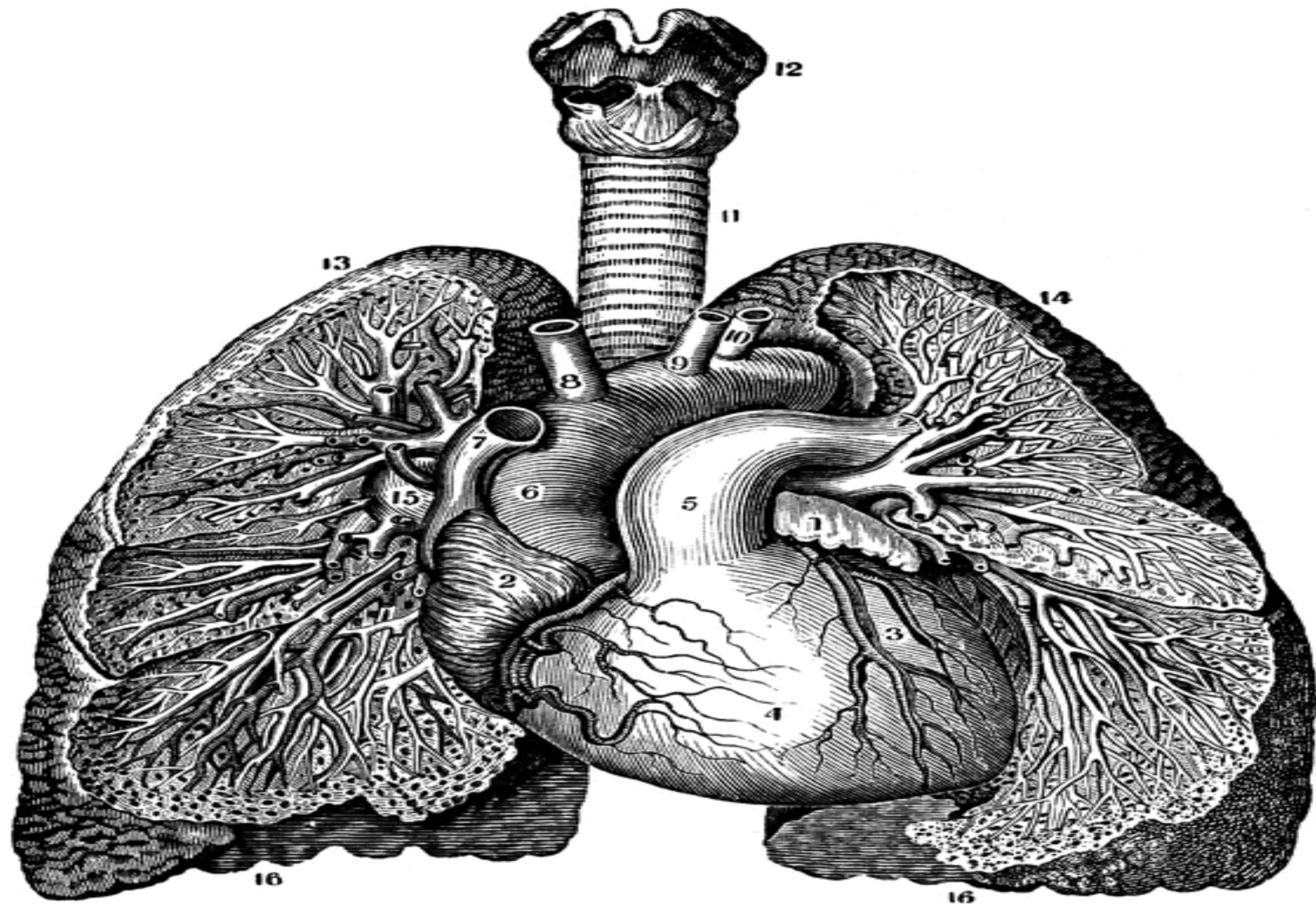


Objective :

- Be able to label the parts of the human heart
- Understand blood circulation in the body

Extra Resources :

Video <https://www.youtube.com/watch?v=KSbbDnbSEyM> (heart song)
https://www.youtube.com/watch?v=_8laqzNh3D0 (heart dissection)
<https://www.youtube.com/watch?v=qmNCJxpsr0&t=10s> (circulation)



pulmonary artery

an artery that carries oxygen poor blood from heart to the lungs

aorta

an artery that carries oxygen rich blood from the heart to all the body cells

vena cava

a vein that carries oxygen poor blood from the body back to the heart

pulmonary vein

a vein that carries oxygen rich blood from the lungs back to the heart

right atrium

left atrium

VALVE

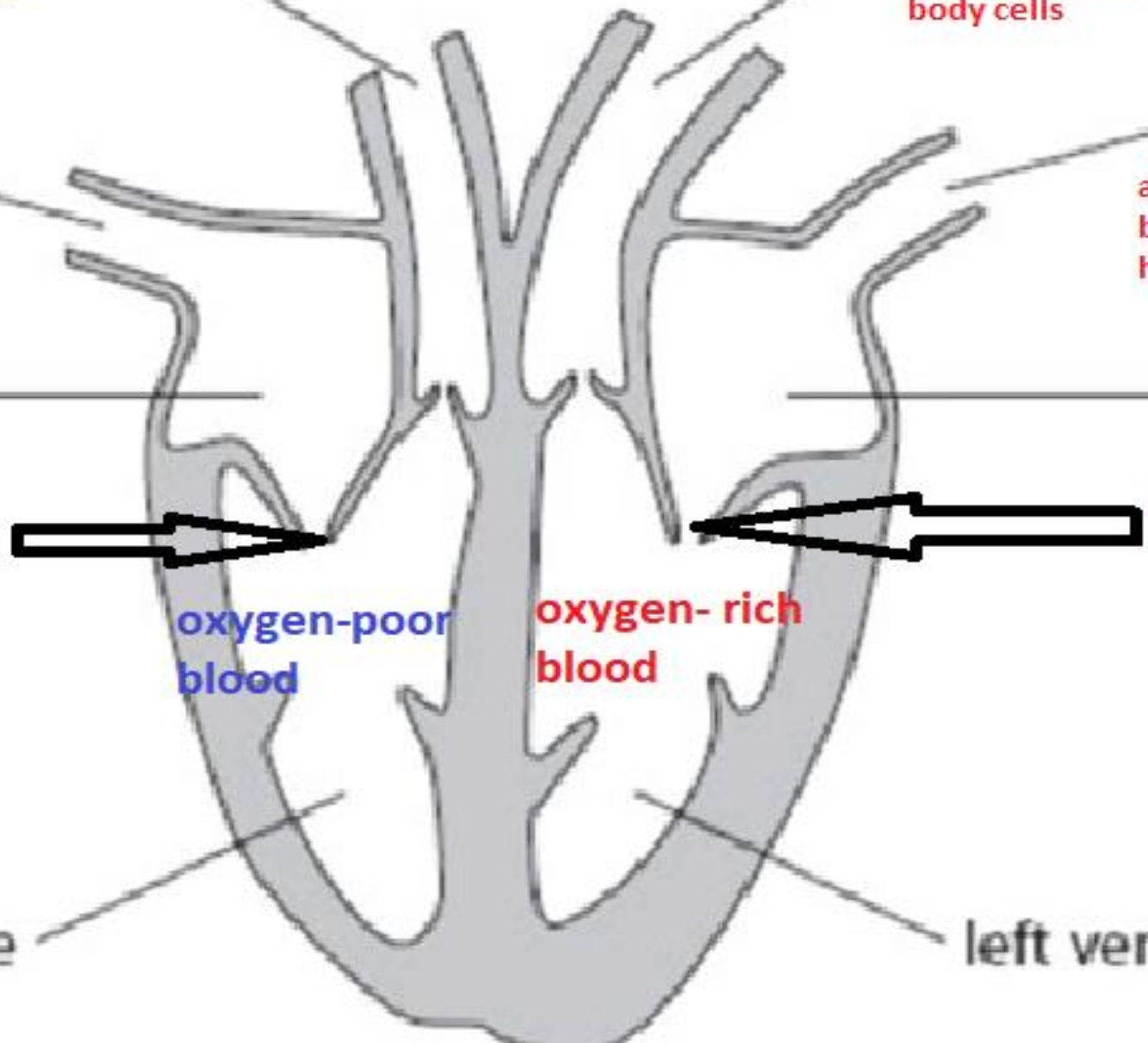
VALVE

oxygen-poor blood

oxygen-rich blood

right ventricle

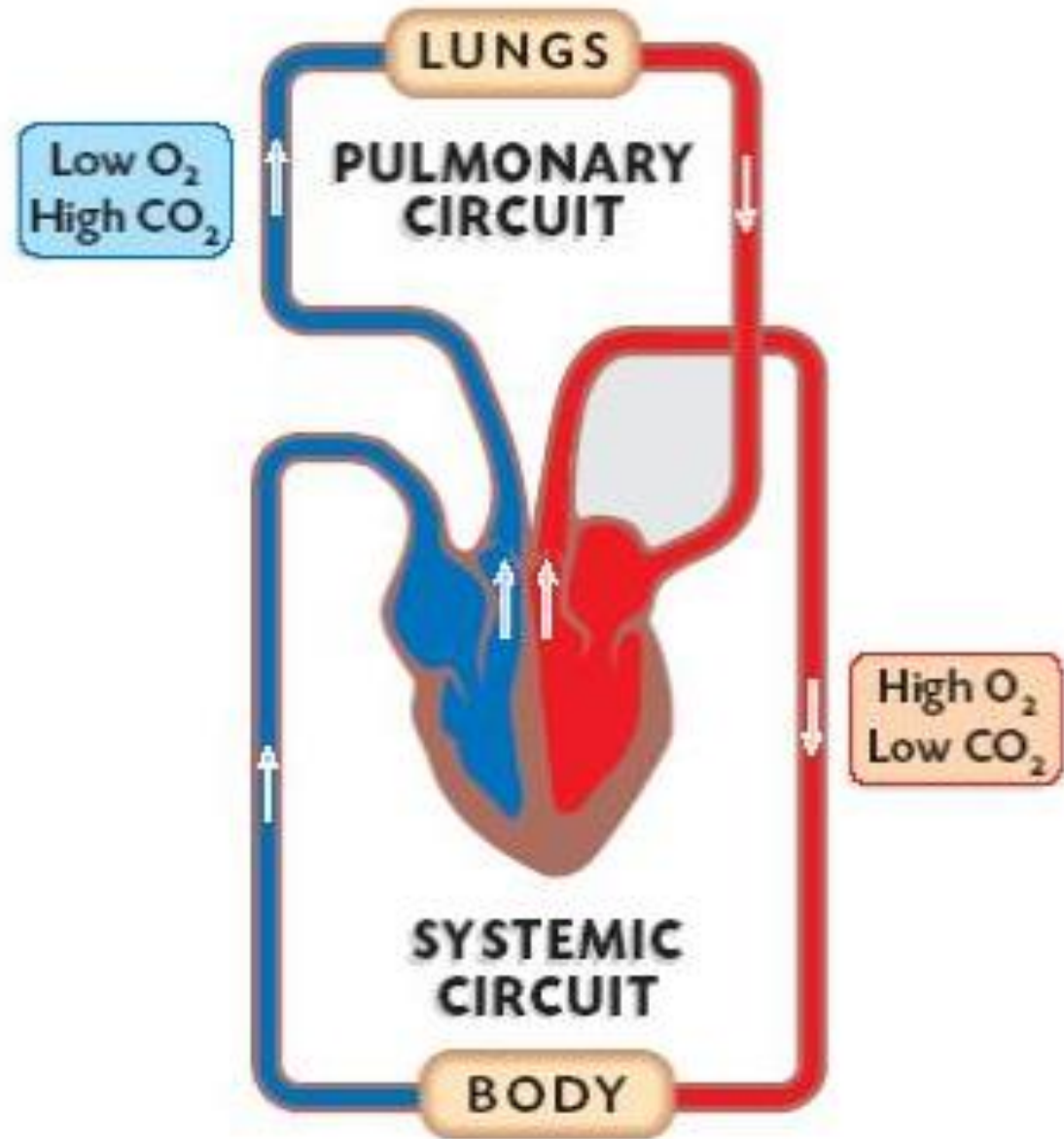
left ventricle



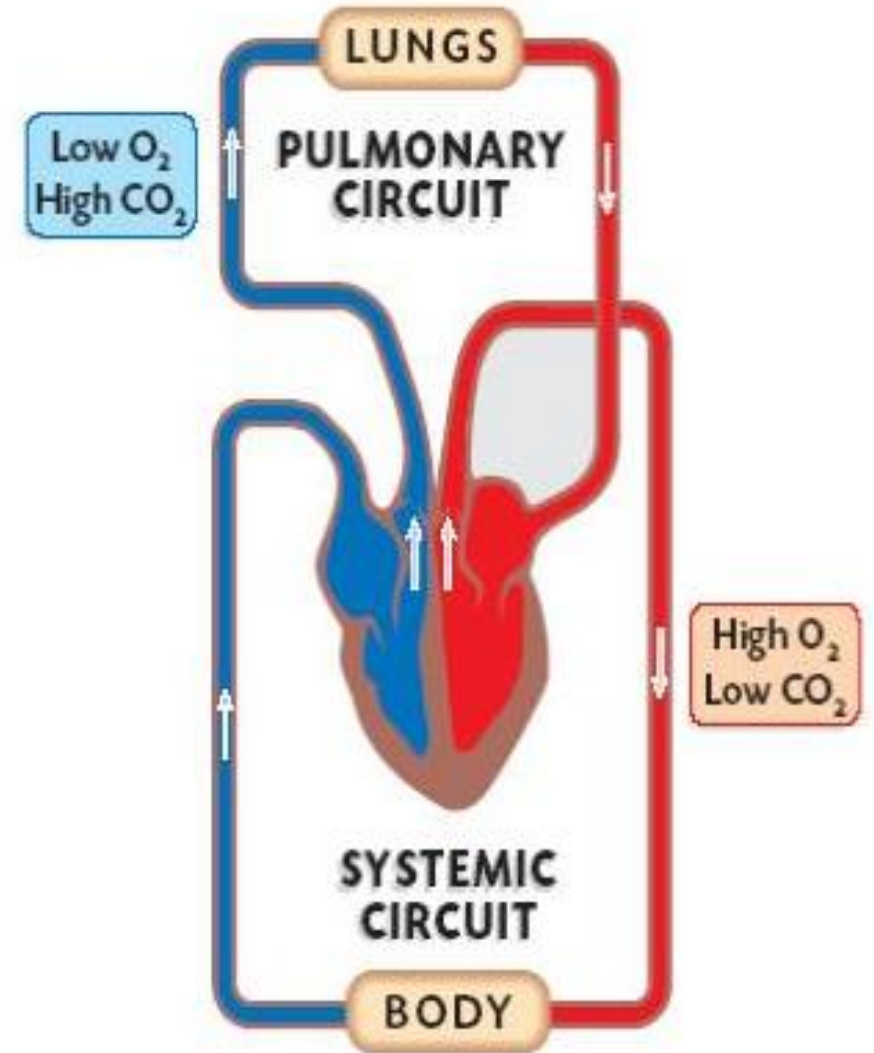
Circuits

Blood circulates in all over your body to give the cells oxygen and glucose needed for respiration and it takes away carbon dioxide to the lungs .

The diagram attached represents how blood circulates in your body .



- Ventricles pump blood
- Atria receive blood
- **The Left side of the heart** contains **oxygen- rich blood (high O₂)**
- **The left atrium** receives **oxygen-rich blood from the lungs** .(in a pulmonary vein)
- **Left ventricle** pumps **oxygen-rich blood to all parts of the body** (through the aorta)
- **The Right side of the heart** contains **oxygen poor blood (high CO₂)**
- **The right atrium** receives **oxygen-poor blood from all cells of the body** (in the vena cava)
- **The right ventricle** pumps **oxygen – poor blood to the lungs** .(through the pulmonary artery)



- All arteries carry oxygen rich blood except one artery
(the artery that carries the blood from the heart **to the lungs**)

Pulmonary artery

- All veins carry oxygen poor blood except one vein
(the vein that carries the blood **from the lungs** back to the heart)

Pulmonary vein

Check your understanding

Q1. The diagram attached represents the structure of the heart .

1. Name the parts :

A :..... **right atrium**

B:**left atrium**

C:..... **right ventricle**

D: **left ventricle**

2. Name the blood vessel number 3: **aorta**

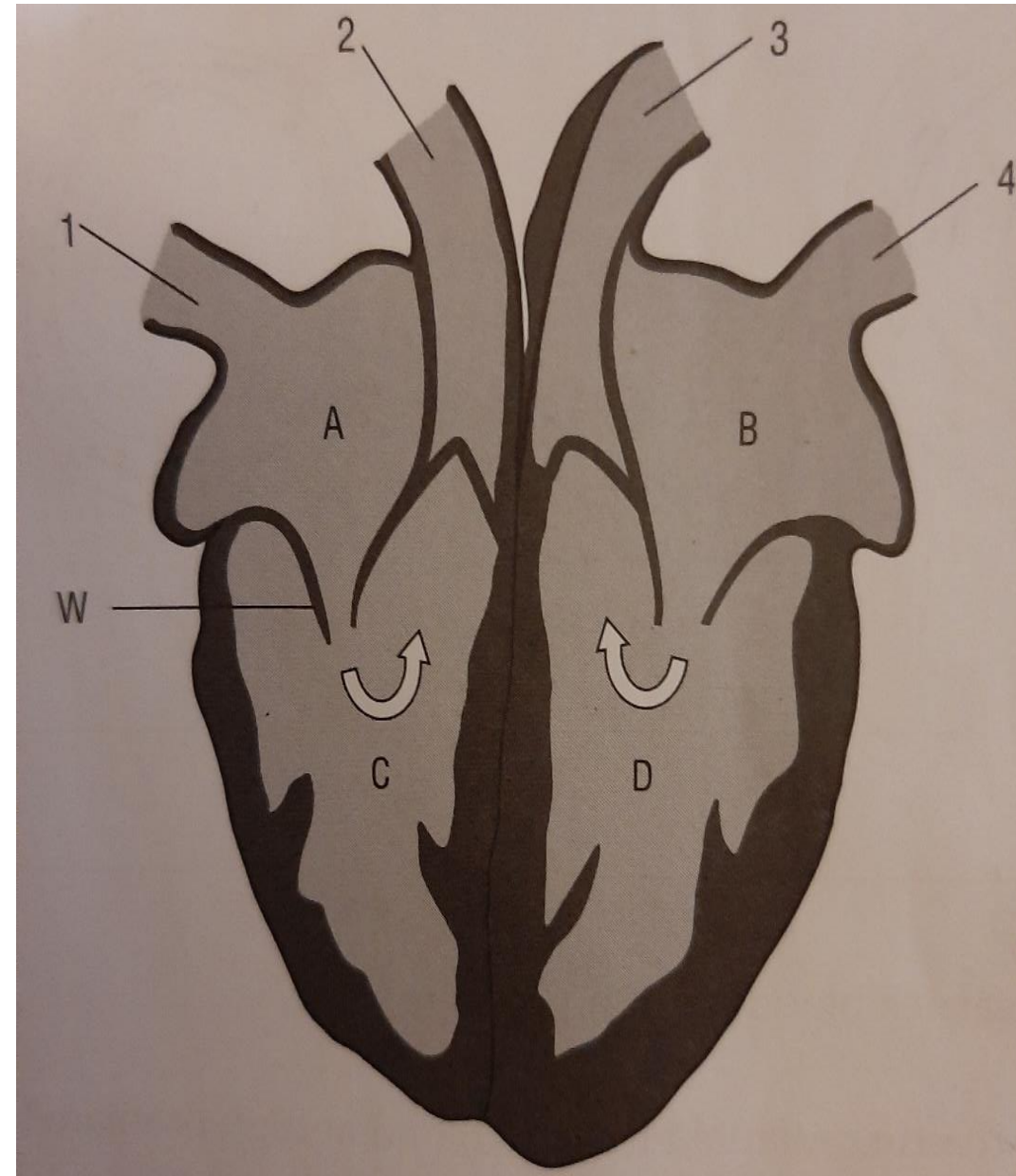
3. What is the structure labelled W ? **Valve**

4. Which side of the heart **receives oxygen-poor blood** ?..... **Right side**

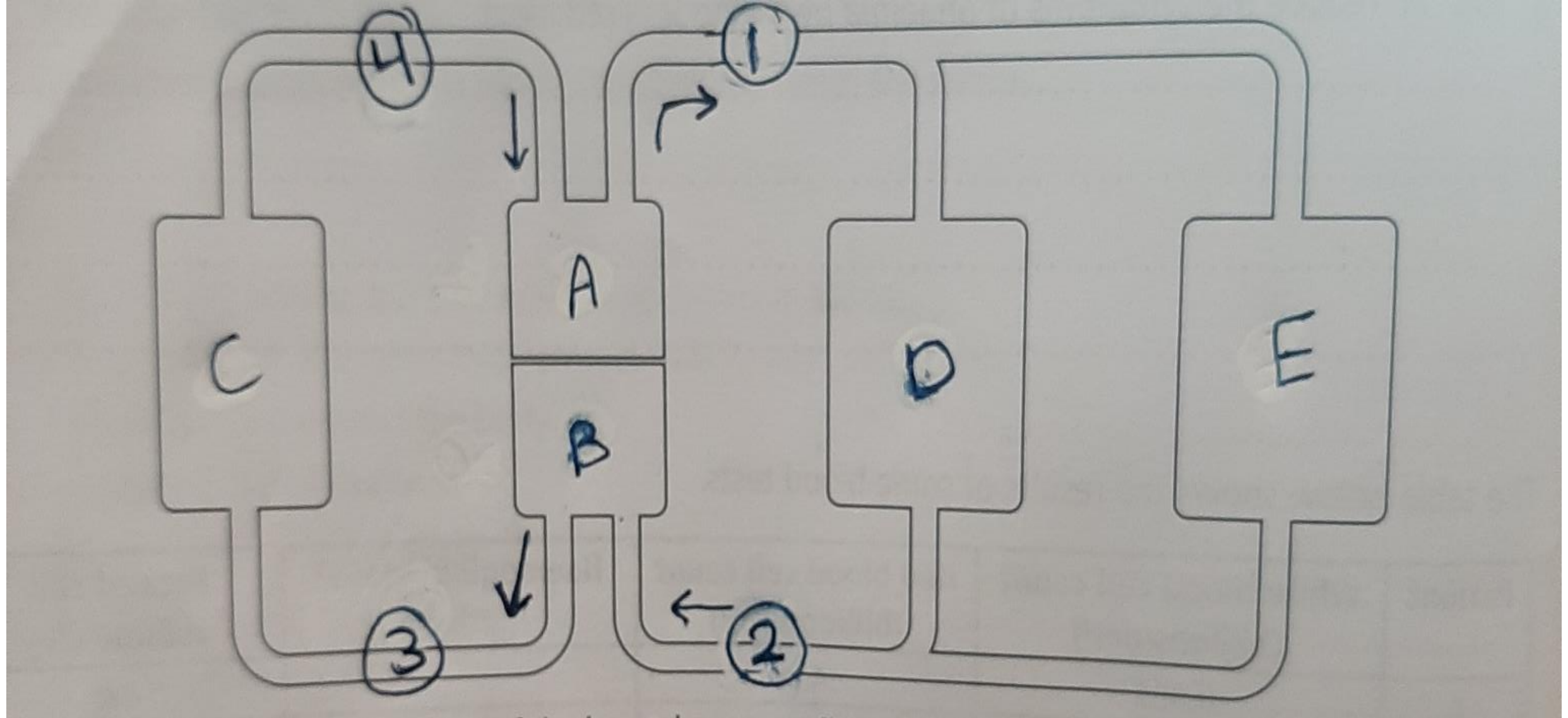
5. What is the name of the blood vessel that **delivers this oxygen- poor blood to the heart** ? **vena cava**

6. Which side of the heart **receives oxygen rich blood** ? **left side**

7. What is the name of the blood vessel that **delivers this oxygen-rich blood to the heart** ?**pulmonary vein**



Q2. The diagram below shows the human circulatory system .



a. Write the correct letter from the diagram for each of the following parts :

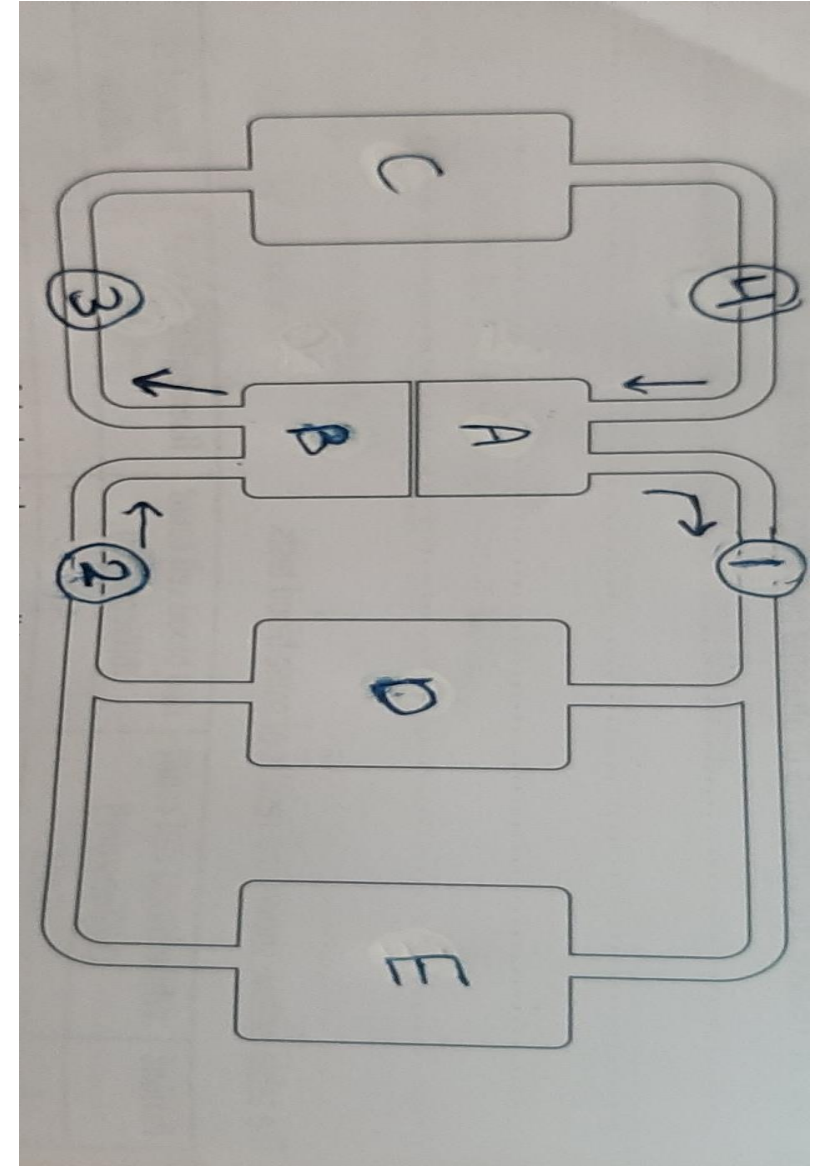
Left side of the heart**A**...

Right side of the heart**B**...

Lungs**C**.....

Small intestine**D**.....

Other tissues**E**.....



b. Refer back to the diagram above to fill in the blanks in the sentences below:

Blood vessel number 1 is an **artery (aorta)** it carries **oxygen- rich** blood.

Blood vessel number 2 is a **vein (vena cava)** it carries **oxygen- poor** blood.

Blood vessel number 3 is an **artery (pulmonary artery)** it carries **oxygen- poor** blood.

Blood vessel number 4 is a **vein (pulmonary vein)** it carries **oxygen – rich** blood.

