

THEME: THE HUMAN BODY

TOPIC: THE CIRCULATORY SYSTEM

BLOOD CIRCULATION

What is blood circulation

- This is the movement of blood through the heart and blood vessels.
- This is the flowing of blood through the heart and blood vessels.
- This the movement of blood through/around the body.

Name two types of blood circulation

- Systemic circulation/single circulation
- Pulmonary circulation/Double circulation

Give two importance of blood circulation?

- It helps to distribute nutrients in the body.
- It helps to distribute oxygen in the body.
- It helps to distribute hormones in the body.
- It helps to distribute medicines in the body.
- It helps in the removal of wastes from the body.

Who discovered blood circulation?

- Sir William Harvey

THE CIRCULATORY SYSTEM

What is the circulatory system?

- This is a system of organs which help to circulate blood in the body.
- This is a body system that deals with the circulation of blood.

Name the materials transported in the body

<ul style="list-style-type: none">- Nutrients (digested food)- Water- Oxygen- Hormones- Medicines	<ul style="list-style-type: none">- Antibodies- Carbon dioxide- Poisons- Urea- Uric acid
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Mention two components/parts of the circulatory system

- The heart
- Blood
- Blood vessels

THE HEART

- This is a blood plumbing muscular internal body organ.
- The heart is found in the **chest cavity** between the lungs.
- It is protected by **the ribcage**
- It is made of muscles called **cardiac muscles**.
- The heart is enclosed in a membrane called **pericardium**.
- The **pericardium** produces **pericardial fluid**
- The pericardial fluid lubricates the heart.
- It also reduces friction during heartbeat.

CHAMBERS OF THE HEART

- The mammalian heart has **four** chambers
- The upper chambers are called **auricles/atria**
- The lower chambers are called **ventricles**.
- **Auricles/atria** receive blood while **ventricles** pump blood.

Name the four chambers of the heart

- Right auricle/atrium
- Left auricle/atrium
- Right ventricle
- Left ventricle

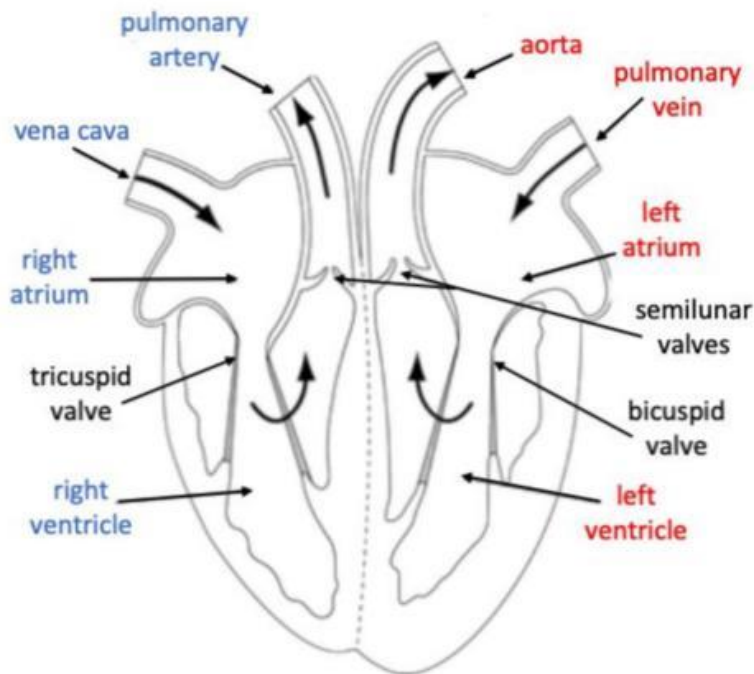
Name the blood vessel that supplies the heart muscles with nutrients and oxygen.

- Coronary artery.

SIDES OF THE HEART

- The heart has two sides (right side and left side)
- The right side handles deoxygenated blood
- The left side handles oxygenated blood
- The left side is thicker/more muscular than the right side.
- It handles blood that is pumped with high pressure to all body parts.
- The right side is separated from the left side by the **septum**

THE STRUCTURE OF THE MAMMALIAN HEART.



FUNCTIONS OF EACH PART

1. Aorta

- Transports/carries oxygenated blood from the heart to all body parts.
- It is the largest artery in the body.

2. Vena cava

- Transports/carries deoxygenated blood from all body parts to the heart.
- It is the largest vein in the body.
- Deoxygenated blood is then pumped from the heart to the lungs.

3. Pulmonary artery

- Transports/carries deoxygenated blood from the heart to the lungs.
- Blood goes to the lungs to remove carbon dioxide and get oxygen.
- Blood goes to the lungs to pick oxygen and drop carbon dioxide

4. Pulmonary vein

- It carries/ transports oxygenated blood from the lungs to the heart.
- Blood comes back to the heart to be pumped to all body parts

5. Septum

- It prevents the mixing of oxygenated blood and deoxygenated blood.
- It prevents oxygenated blood from mixing with deoxygenated blood.
- It separates the two sides of the heart (left side and right side)

6. Right auricle

- It receives deoxygenated blood from the body

7. The left auricle

- It receives oxygenated blood from the lungs.