Circulatory System

A note to teachers

This resource is recommended for use in two ways:

- As the answer scheme to the Circulatory System Challenge cards. Using the challenge cards, students discover the answers to each question as they are using the Virtuali-Tee app. Downloads are available in the teacher resources repository https://drive.google.com/drive/folders/17N-hPZnEAdBwevuxAYoTi-yasNatYQM9?usp=sharing
- 2. As a group quiz after using the Virtuali-Tee app.





How many miles (or kilometers) of blood vessels are in the average human body?

- A. 10 miles (16 km)
- B. 100 miles (160 km)
- C. 6000 miles (9,656 km)
- D. 60000+ miles (96,560 km)

Compare that to the earth circumference of only 24,000 miles (38,600km)!



Blood that enters the lungs to receive oxygen is known as ...

- A. Deoxygenated blood
- B. Oxygenated blood
- C. Detoxified blood
- D. Retoxified blood

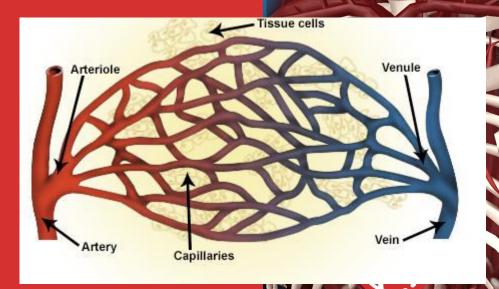
The blood has had oxygen removed and is therefore "de" oxygenated.



Which one of the following is in the correct order of blood

flow:

- A. Vein, artery, arteriole, capillary
- B. Vein, arteriole, capillary, artery
- C. Artery, arteriole, capillary, vein
- D. Artery, capillary, vein, artery



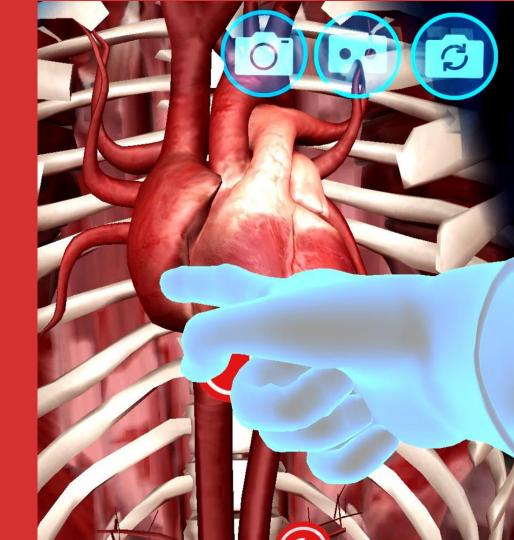
"Capillar" comes from the Greek for "hairlike".



How often does the heart beat?

- A. Every time you blink
- B. 1 million times a day
- C. Every time you breath in
- D. 100,000 times a day

Your heart is busier than you, beating even when you are resting; between 60 and 100 times a minute!



What is the name of the upper chambers of the heart?

- A. Ventricles
- B. Atria
- C. Valves
- D. Veins

Atria is also the name used for large open spaces in a building, and comes from the Latin "Atrium", which was the word for the central court in a house.



What stops the blood in your heart from flowing the wrong way?

- A. Gravity
- B. Pistons
- C. Valves
- D. Cogs

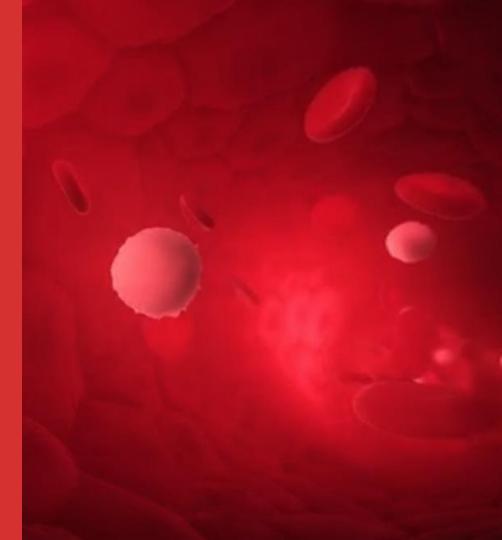
Just like in a bicycle pump, valves control the direction of blood flow in the heart.



What do red blood cells carry?

- A. Carbon dioxide to the lungs
- B. Nutrients to the muscles
- C. Instructions from the brain
- D. Oxygen around the body

Red blood cells carry oxygen to tissues and organs in the body, and that oxygen is used to clean the blood.





Which statement is correct?

- A. All blood that returns to the heart is deoxygenated
- B. Exchange of carbon dioxide to the lungs occurs in the bronchioles
- C. Blood flows away from your heart via arteries
- D. None of the above

Veins carry blood back to the heart; they are darker than arteries as they carry back deoxygenated blood. Arteries are much thicker to contain the high pressure of blood pumping through to your entire body.



Which of the following carries waste away from tissues and organs?

- A. Platelets
- B. White blood cells
- C. Plasma
- D. Red blood cells

Plasma makes up for approximately 55% of total blood volume. Plasma is also the coolest name in the body! It is a clear, straw-coloured fluid. It also helps carry the blood cells around your body.



The LUB-DUB sound that the heart makes is caused by:

- A. Flow of blood into the heart
- B. Push of blood out of the heart
- C. Closing of the valves
- D. Opening of the valves

A defective valve can cause a hissing sound when a stream of blood squirts backwards through the valves.

