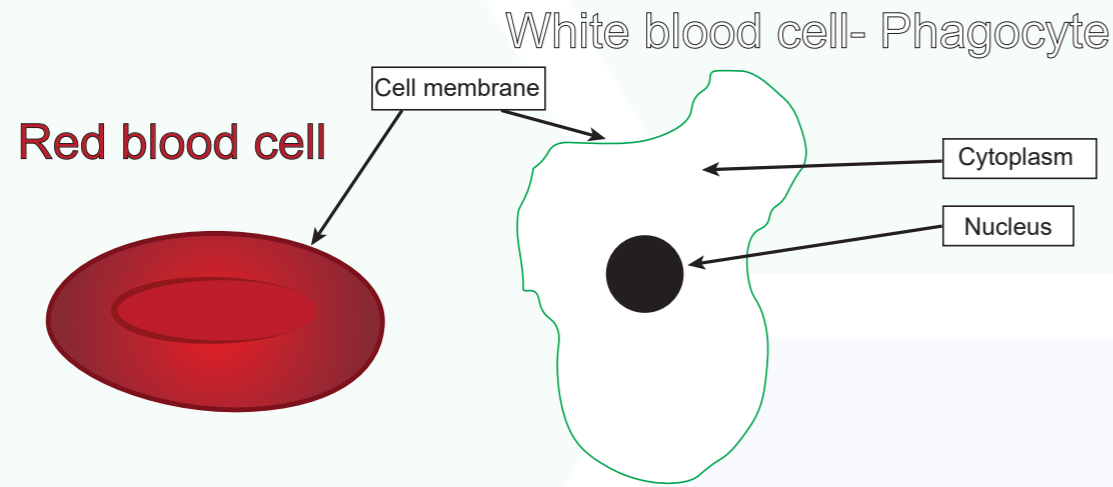


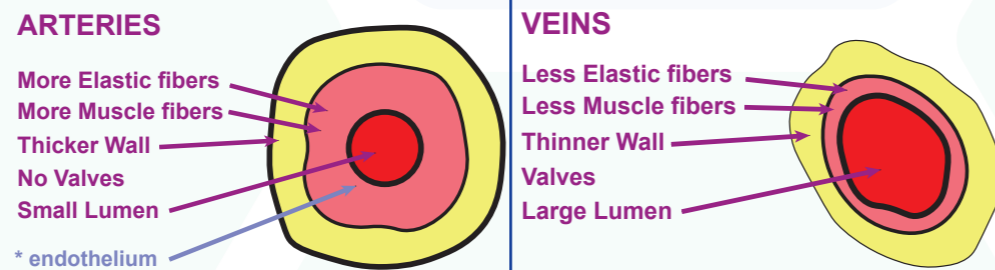
## Blood



## Parts of the Blood

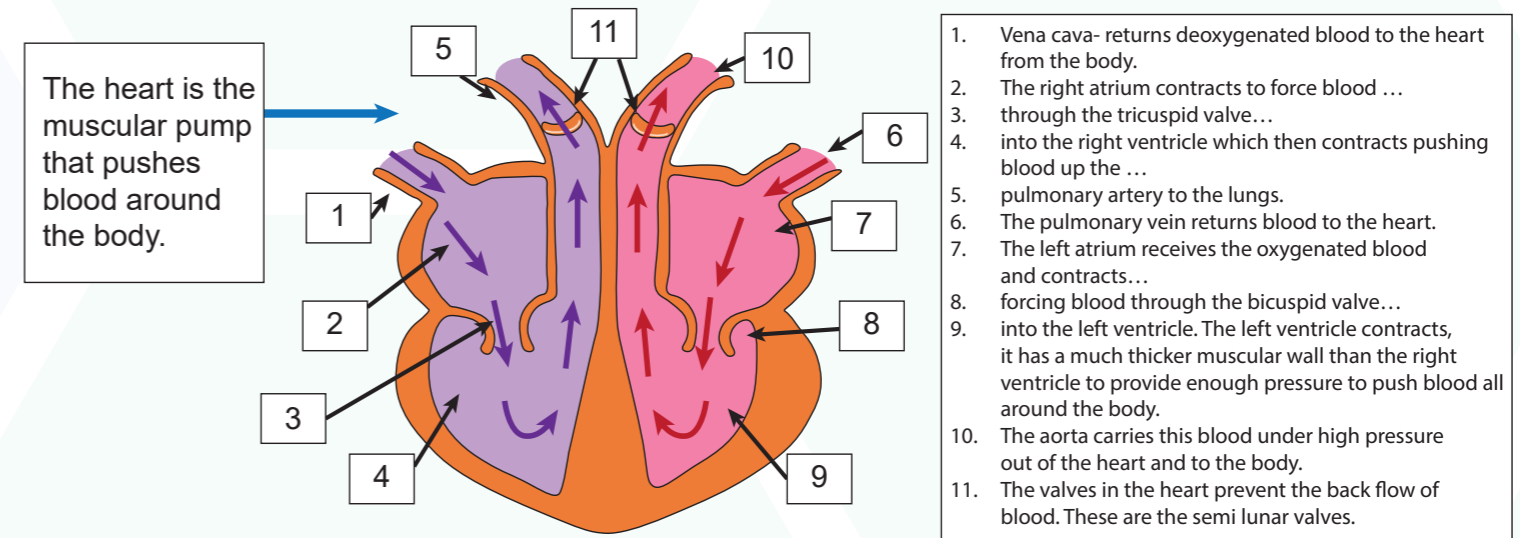
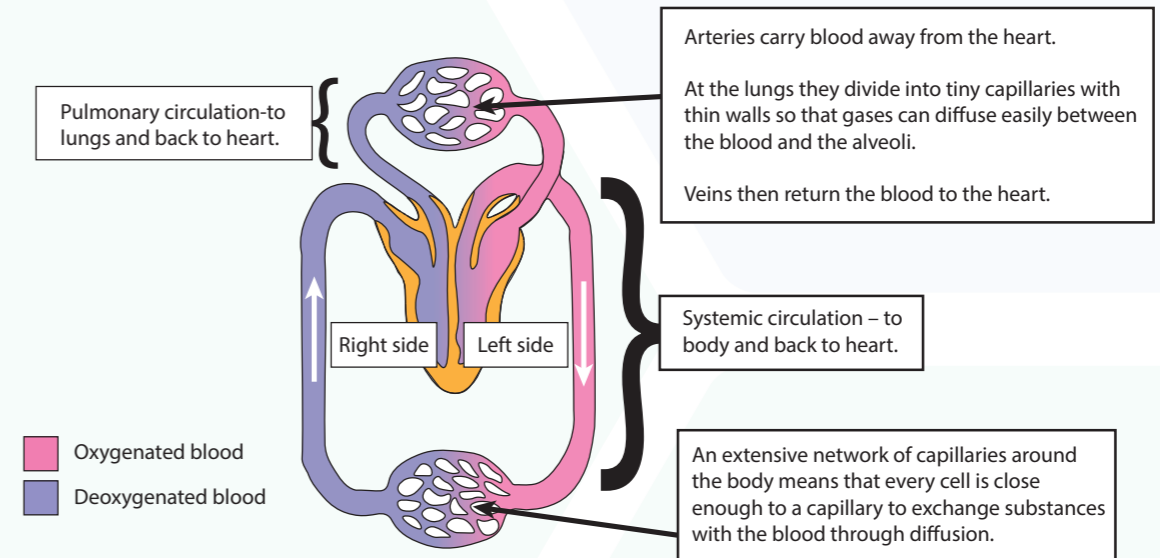
| Structure         | Function  |
|-------------------|---|
| Red blood cells   | Contain haemoglobin for transport of oxygen   |
| White blood cells | Defend against infectious disease   |
| Platelets         | Clot the blood  |
| Plasma            | Carries dissolved substances e.g. Urea, carbon dioxide, soluble food and distributes heat |

## Arteries and veins - Separate science only



|                      |                 |               |
|----------------------|-----------------|---------------|
| Type of Blood        | Oxygenated      | Deoxygenated  |
| Direction            | Away from heart | Towards heart |
| Pressure             | Higher          | Lower         |
| Size of Hole (lumen) | Smaller         | Larger        |
| Wall Thickness       | Thicker         | Narrower      |
| Valves?              | No              | Yes           |

## Circulation and the Heart



## Coronary heart disease

- Risk factors
- High fat diet
- High salt diet
- High blood pressure
- High blood cholesterol
- Smoking
- Genetic factors
- Lack of exercise

## Treatments separate science only

- Statins
- Angioplasty
- Change of lifestyle

Coronary arteries can be seen on the outside of the heart, they supply the heart with glucose and oxygen for respiration. The heart needs to respire to get the energy for the muscular contractions needed to push blood. An atheroma (fatty deposit) may block these arteries leading to a heart attack.