



Science study

Blood



- RED BLOOD CELLS (38-48%)
- PLASMA (52-62%)
- PLATELETS (1-1%)
- WHITE BLOOD CELLS (1-1%)

plasma
watery liquid that blood cells are suspended in and waste is carried

red blood cells
carry oxygen

white blood cells
defend us and attack threats

platelets
clot blood when wounds occur

carries nutrients
carries oxygen
cleans waste
protects

X arteries only carry deoxygenated blood

X blood is NOT blue
Only blue to show difference in blood through diagrams

✓ blood is **bright red** (oxygenated) or **dark red** (deoxygenated)



Animals, including humans

Circulatory system

1 **deoxygenated** blood pumped to lungs

2 In lungs - blood disposes of **carbon dioxide** and picks up **oxygen**

3 **oxygenated** blood returns to the heart and is pumped around the body

oxygenated blood
arteries
(muscular tubes that carry blood away from the heart)

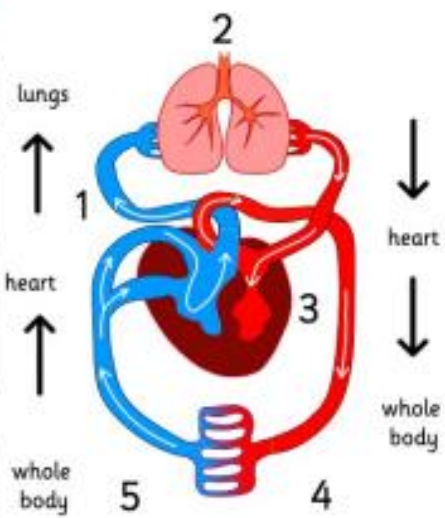
arteries become smaller and blood goes into...

4 **capillaries**
fine blood vessels close to body tissue and cells

blood meets cells

- blood → oxygen + sugar
- blood ← carbon dioxide + waste

5 blood returns to heart through **veins**
(less muscular than arteries and closer to the skin)

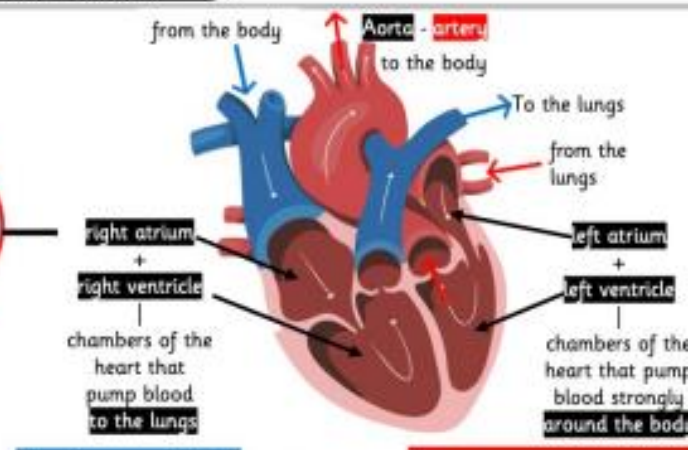


oxygen
an element (gas) vital for life - red blood cells carry oxygen (**oxygenated**)

deoxygenated
blood that has given oxygen to cells and taken away carbon dioxide waste (scientific diagrams show this blood as **blue**, but we know it is **dark red**)

carbon dioxide
waste gas produced by cells and removed by plasma in the blood

The heart



right side receives blood from the body and sends it to the lungs

left side receives blood from the lungs and pumps it away from the heart