The Circulatory System

The circulatory system is a really important part of our body. The word 'circulatory' means something that is going round and round in a circle or loop. This is exactly what is happening in our bodies all the time.



What Circulates and Why?

The simple answer is your blood is circulated all around your body. The blood is doing a really important job - it is taking nutrients, hormones and oxygen all around the body to all the places they need to go. The oxygen comes into your body when we breathe in and it goes into our lungs. Then, inside the lungs, this oxygen goes into our blood and starts its journey around the body. You could think of the blood cells a bit like delivery drivers that drop off the oxygen to where it needs to be. Oxygen is dropped off all around the body to thinner blood vessels, which transfer (move across) the oxygen to the cells in the body.

The Heart

The heart is at the heart of it all! Without the heart, no blood would get anywhere around your body. The heart is basically a big pump that constantly pumps the blood around the circulatory system. This has to happen all the time (even when you are asleep) to keep you alive. There are two loops in the circulatory system; the first goes to and from the heart visiting the lungs to collect oxygen and get rid of carbon dioxide. The other loop is much larger and goes to and from the heart, but travels all around the body in between.

Did You Know...?

- The average persons' heart will beat 2.5 billion times during a lifetime.
- Amazingly, it takes under 20 seconds for one red blood cell to go round the whole body.
- Red blood cells last about 4 months before your body makes new ones.



The Other Half of the System

We've talked about the blood in your system collecting oxygen, nutrients and hormones and delivering them all around the body, but it also does another important job. It also takes carbon dioxide from your body back to the lungs to be let out when you breathe out. If we think of our red blood cell delivery drivers again, they also collect the waste and take it away again. So, they are delivery drivers and waste disposers all in one!







The Circulatory System Questions

- 1. What does 'circulatory' mean?
- 2. What is circulated around the body with our blood? **Tick one**.
 - \bigcirc nutrients
 - 🔿 oxygen
 - \bigcirc hormones
 - \bigcirc all of the above
- 3. In which organ does the oxygen go into the blood?
- 4. Why are there two loops in the circulatory system? What does each one do?
- 5. What waste product is removed through the lungs?
- 6. How long does it take for one red blood cell to go round the body? **Tick one**.
 - o 20 seconds
 - o 20 minutes
 - o 24 hours
 - o 24 minutes
- 7. What are the blood cells compared to?
- 8. Why is the heart so important? Use evidence from the text to explain fully.



The Circulatory System **Answers**

- What does 'circulatory' mean?
 Travelling in a circle or continuous loop.
- 2. What is circulated around the body with our blood? **Tick one**.
 - O nutrients
 - 🔿 oxygen
 - ⊖ hormones
 - ⊘ all of the above
- 3. In which organ does the oxygen go into the blood? **The Lungs.**
- There are there two loops in the circulatory system. What does each one do?
 There are two loops in the circulatory system one that pumps the blood to the lungs to get oxygen, and another where the oxygenated blood is pumped around the rest of the body.
- 5. What waste product is removed through the lungs? **Carbon Dioxide**
- 6. How long does it take for one red blood cell to go round the body? **Tick one**.
 - ⊘ 20 seconds
 - 20 minutes
 - 24 hours
 - 24 minutes
- What are the blood cells compared to?
 The blood cells are compared to delivery drivers as they transport important things all around our bodies.
- 8. Why is the heart so important? Use evidence from the text to explain fully. The heart is really important because it pumps the blood all around the body. If the heart wasn't there pumping the blood, none of our organs would get the things they need like oxygen, nutrients and hormones.

