# **The Circulatory System**

The circulatory system is an essential part of our body. The word "circulatory" means something that is going around in a circle or loop. This is exactly what is happening in our bodies all of the time.

### What Circulates and Why?

The simple answer is your blood is circulated all around your body. The blood is doing an important job. It is taking oxygen all around the body to all the places it needs to go. Oxygen comes into our bodies when we breathe in. It goes into our lungs. Then, this oxygen goes into our blood. Here it starts its journey around the body. You could think of the blood cells like delivery drivers. They drop off the oxygen where it needs to go. Oxygen is dropped off all around the body to thinner blood vessels. These transfer 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 a big pump. It constantly pumps the blood around the circulatory system. This has to happen all the time to keep you alive. There are two loops in the circulatory system; the first goes to and from the heart. It visits the lungs to collect oxygen and get rid of carbon dioxide. The other loop is much larger. It goes to and from the heart but travels all around the body in between.

## The Other Half of the System

We've talked about the blood in your system collecting oxygen and delivering it all around the body. It also does another important job. It 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 cells as 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 is the function of the heart?
  - $\bigcirc$  It rids the body of waste.
  - O It acts as a pump.
  - It brings carbon dioxide to the entire body.
  - It helps with digestion.
- 2. What does the word 'circulatory' mean?
  - $\bigcirc$  communicate
  - carry around in a loop
  - bring oxygen
  - O create blood cells
- 3. Which of these statements about blood is false?
  - It circulates oxygen to cells.
  - It carries carbon dioxide to the lungs.
  - It carries blood to and from the heart.
  - It reproduces new body cells.
- 4. What two substances does blood carry?
  - nutrients and carbon
  - O carbon dioxide and oxygen
  - O nitrogen and oxygen
  - sulfur and nitrogen
- 5. Could a person survive without a heart? Why or why not?

6. Which gas do you breathe out? Which gas do you breathe in?





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# Answers may vary. A possible answer is: No, a person could not survive without a heart because the body needs it to pump blood.

6. Which gas do you breathe out? Which gas do you breathe in?

I breathe out carbon dioxide. I breathe in oxygen.

