

An Amazing Machine

A machine has many parts that work together. In much the same way, the human body has systems that work together to keep a person alive. One system is not more important than another. All are necessary in order for the body to survive. Two body systems that work together are the circulatory system and the respiratory system.

The Human Circulatory System



The circulatory system moves blood throughout your body. Your cells need a constant supply of fresh blood. Blood has red blood cells, white blood cells and platelets. The red blood cells carry oxygen from the lungs to the rest of your body. They also bring back carbon dioxide and waste. White blood cells destroy germs to keep your body healthy. Platelets stop bleeding by forming clots. In fact, without platelets, you could bleed to death from a small cut!

Your heart is a muscle about the size of your fist. It acts as a pump for the circulatory system. Without it, your blood would not be able to move around your body. Your heart actually has two pumps. The pump on the left side of your heart collects blood from your lungs. This blood contains

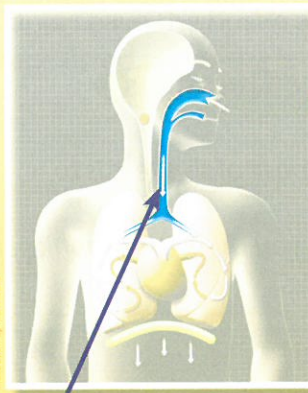


platelet

oxygen and is pumped to all the cells in your body. The pump on the right side of your heart gets the blood returning from the cells, which contains carbon dioxide, and moves it to your lungs, where the carbon dioxide is removed and oxygen is added.

The Human Respiratory System

Your respiratory system gives your body oxygen and gets rid of carbon dioxide. When you inhale, your lungs get bigger, and oxygen rushes into them. When you exhale, your chest gets smaller, pushing carbon dioxide out. Air is inhaled through your nose or mouth. Inside your nose are millions of tiny hairs. These hairs trap dust and dirt so that mostly clean air flows down your trachea to your lungs. Just above your lungs, the trachea splits into two tubes. One tube enters each lung.



trachea

Inside your lungs, these tubes branch into many smaller tubes. These smaller tubes have millions of air sacs. Carbon dioxide and oxygen are exchanged in these air sacs. Carbon dioxide leaves your blood and goes into the air sacs. Then oxygen moves through the air sacs into your blood. This oxygen-filled blood moves to your heart, while the carbon dioxide leaves your lungs the next time you exhale.

Literal Questions

- 1 Which two body systems are discussed in this report?

- 2 The circulatory system moves what? _____
- 3 Your cells need a constant supply of what? _____
- 4 Which blood cells bring back carbon dioxide and waste? _____
- 5 Which blood cells destroy germs? _____
- 6 How many pumps does your heart have? _____
- 7 What does the right pump do? _____
- 8 What happens to your lungs when you inhale? _____
- 9 What happens when you exhale? _____

Focus: Finding The Main Idea and Supporting Details

When you read, decide what the text is mostly about. That is the main idea. The main idea is supported by details. Some of the details are important. Others are not as important.

10 The first chart below shows the main idea and supporting details of the section headed 'The Human Circulatory System.' Complete the second chart using information found under the heading 'The Human Respiratory System.'

Topic	The Human Circulatory System
Main Idea	The human circulatory system pumps blood throughout your body.
Detail	Your cells need a constant supply of fresh blood.
Detail	Red blood cells carry oxygen throughout our body.
Detail	White blood cells destroy germs.
Detail	Your heart is the pump of the circulatory system.
Detail	The heart has two pumps which remove carbon dioxide and add oxygen.

Topic	The Human Respiratory System
Main Idea	
Detail	
Detail	
Detail	
Detail	
Detail	