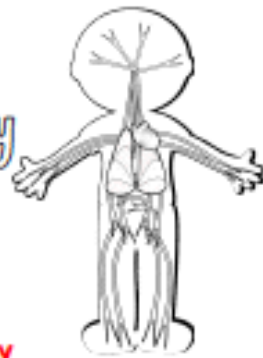


The Circulatory System



By: Answer Key

Answers may vary- These are just some suggestions.

The Big Idea!



The circulatory system is your body's delivery system. It delivers oxygen and nutrients to every part of your body and picks up waste products on the return trip.

The circulatory system has several parts

heart

arteries

veins

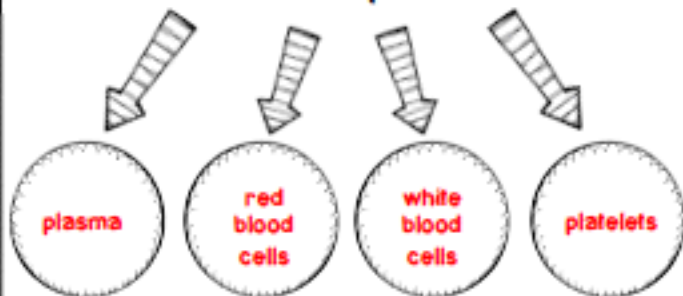
capillaries

blood

platelets

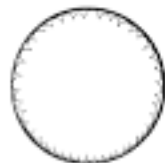
Blood

4 basic parts



plasma

Plasma is the clear liquid part of blood. It carries nutrients and blood cells throughout the body. Plasma is made mostly of water and is the greatest part of your blood. It also contains many proteins, minerals and sugars used by the body to build and repair cells.



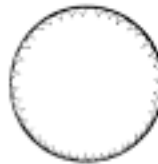
red blood cells

Red blood cells carry oxygen throughout your body. Red blood cells are shaped something like a doughnut without a hole. They are the most common cells in the body. They contain a chemical called hemoglobin which takes in oxygen.

Google images of blood cells and have students draw what a single cell might look like

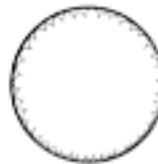


white blood cells



White blood cells help fight disease by surrounding and destroying germs and other intruders. When a person becomes ill, there are more white blood cells than normal in his or her blood.

platelets



Platelets stop bleeding by sticking together and forming clots. The spiky arms of platelets stick to a wound to stop the flow of blood and help form a scab.

Blood Vessels

3 Main Types



Arteries

Veins

Capillaries

The Heart

Is a powerful muscular organ that pumps blood throughout your body. Your heart is like a double pump. Blood flows into the two chambers at the top of the heart. When these chambers contract, blood is squeezed into the two lower chambers. When the lower chambers contract, blood is squeezed out of the heart and to the lungs and body.



How big is the heart?

The heart is about the same size as your fist. It weighs only about 9-12 ounces (250-350 grams), about as much as one of your sneakers. Your heart is in the middle of your chest and the lower end tilts toward the left side.

What is the heart made of?

The heart is made of a special kind of muscle, called cardiac (heart) muscle which never gets tired. Your heart will beat about 30 million times a year.