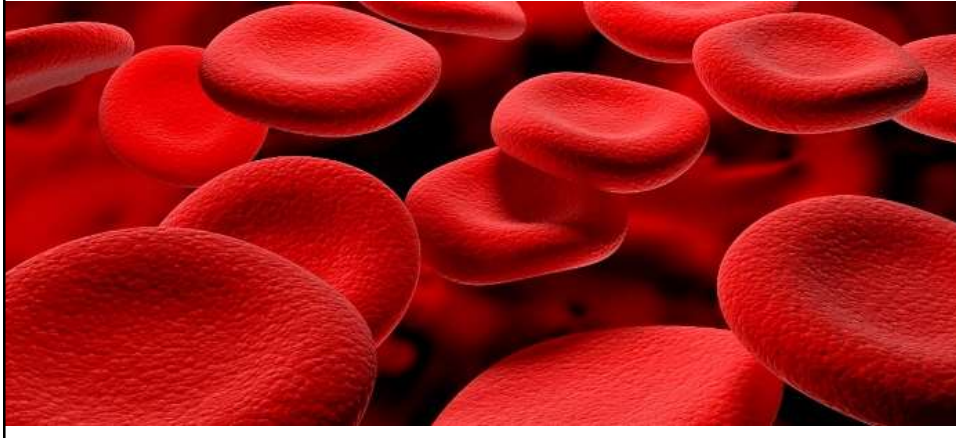
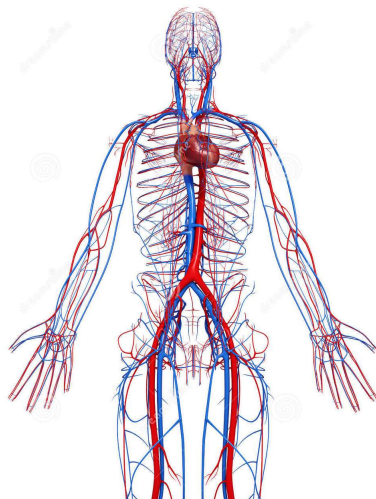


Lesson 2: The Circulatory and Respiratory Systems



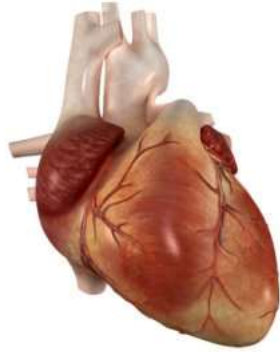
1



**The circulatory
system, or the
cardiovascular
system, moves
blood throughout
our bodies.**

2

Our heart works to pump blood to the cells in our bodies.



The heart is an involuntary muscle. That means it is controlled automatically by our bodies.

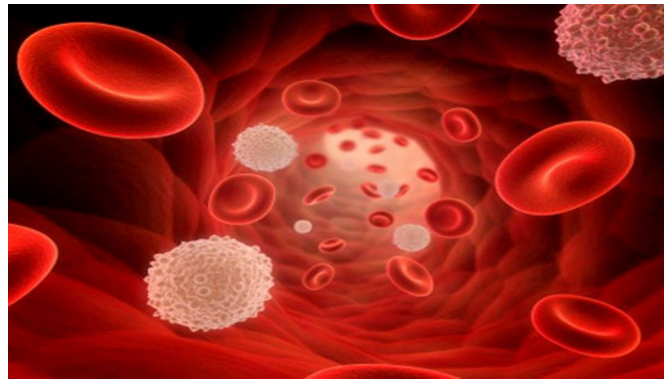
3

Discovery Education Video

The Wonder of the Heart and Circulatory System

4

Blood vessels allow our blood to deliver food and oxygen to the cells in our body.



5

There are three types of blood vessels:

Veins carry blood to the heart.

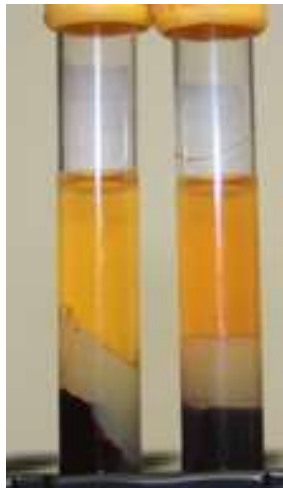
Arteries carry blood away from the heart.

Capillaries are tiny blood vessels that carry blood to individual cells.

6

Blood is made up of several different parts.

7



Plasma is the liquid part of our blood. It carries food to the cells in our bodies.

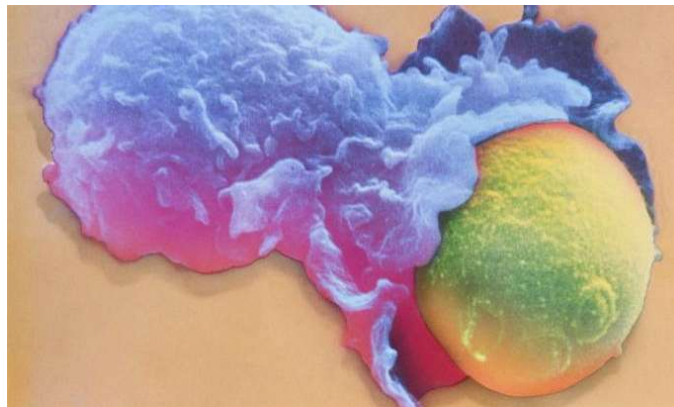
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Red blood cells carry oxygen to our body's cells.



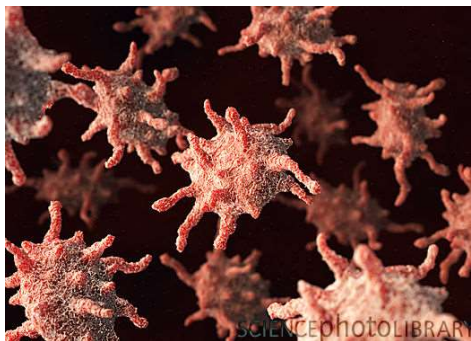
9

White blood cells fight infection and disease in our bodies.

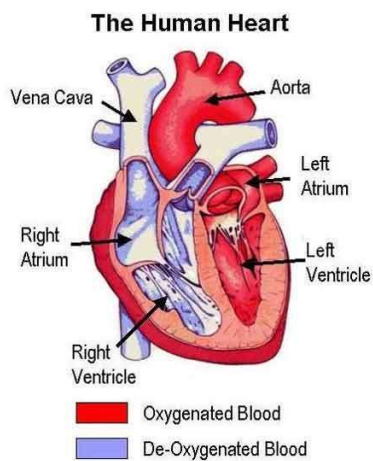


10

Blood platelets help our blood to clot when we are bleeding.



11

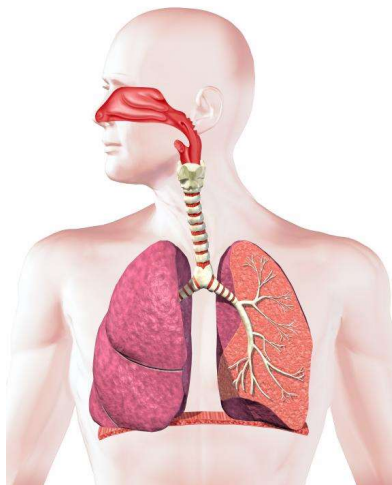


The heart is divided into chambers. The right side takes in oxygen-depleted blood from the body and the left side sends oxygen-rich blood from the lungs to the body.

12

Our blood also transports waste from our body's cells to the kidneys so that it can be removed from our body.

13



The respiratory system allows our bodies to take in the oxygen that our cells need.

14

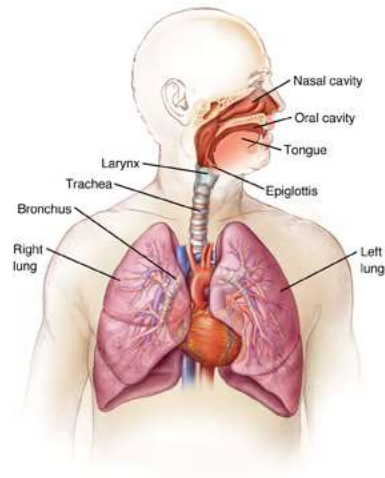
Respiration is the process by which our bodies breathe in oxygen and breathe out carbon dioxide.

Carbon dioxide is a waste product that is removed from our bodies when we exhale.

15

The respiratory system is made up of the lungs and pathways that lead to the lungs.

These pathways include the nose, the trachea (windpipe), and bronchi



16

Discovery Education Video

How We Get Oxygen

17

**Circulation and Respiration:
Key Questions**

- 1. How does blood travel through your body?**
- 2. What is added to the body and removed from the body with every breath?**
- 3. What is in blood?**
- 4. What does blood deliver to and take away from individual cells in the body?**
- 5. Why are the lungs an important part of both circulation and respiration?**

18