KEY CONCEPT
The respiratory and circulatory systems bring oxygen and nutrients to the cells.
The respiratory and circulatory systems work together to maintain homeostasis.

- The circulatory system transports blood and other materials.
  - brings supplies to cells
  - carries away wastes
  - separates oxygen-poor and oxygen-rich blood
30.1 Respiratory and Circulatory Functions

- The respiratory system is where gas exchange occurs.
  - picks up oxygen from inhaled air
  - expels carbon dioxide and water
The respiratory system moves gases into and out of the blood.

- The lungs contain the bronchi, bronchioles, and alveoli.
- Millions of alveoli give the lungs a huge surface area.
- The alveoli absorb oxygen from the air you inhale.
30.1 Respiratory and Circulatory Functions

- Breathing involves the diaphragm and muscles of the rib cage.
- Air flows from areas of high pressure to low pressure.
The circulatory system moves blood to all parts of the body.

- The system includes the heart, arteries, veins, and capillaries.
  - heart pumps blood throughout body
  - arteries move blood away from heart
  - veins move blood back to heart
  - capillaries get blood to and from cells
There are three major functions of the circulatory system.
- transporting blood, gases, nutrients
- collecting waste materials
- maintaining body temperature