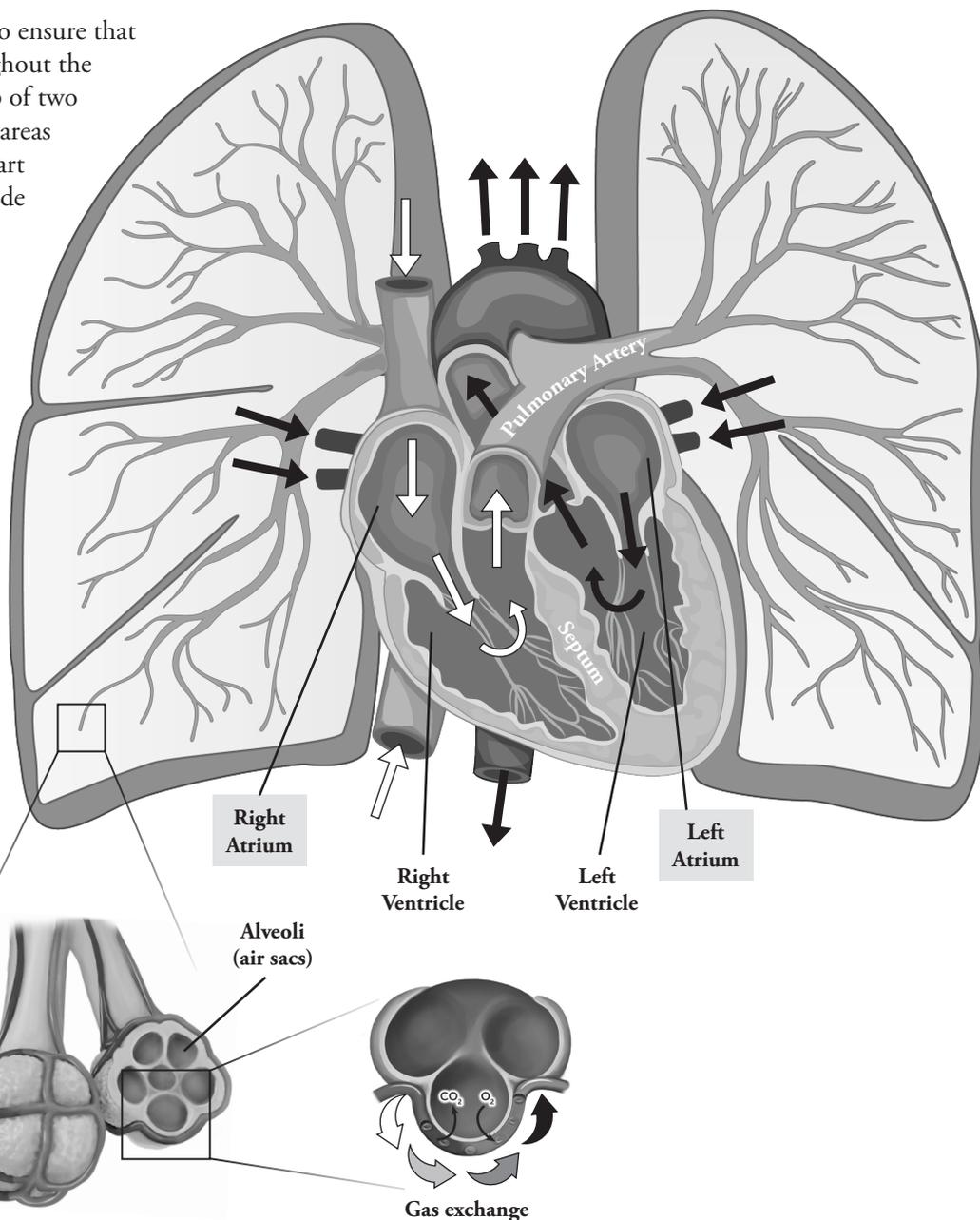
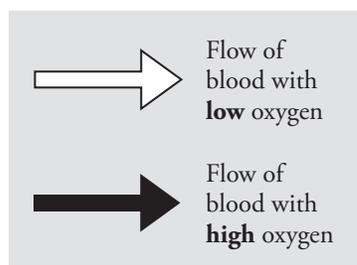


Basics of the Circulatory System

The heart and lungs work together to ensure that blood and oxygen are carried throughout the body. The heart is a muscle made up of two halves that pump blood to different areas of the body. The right side of the heart is smaller and weaker than the left side because it only has to pump blood through the lungs. The left side of the heart is larger and stronger, as it has to pump blood throughout the rest of the body.



Blood returning to the heart from the body has low levels of oxygen and flows into the right atrium, which sends the blood to the right ventricle, which then pumps the blood into the lungs through the pulmonary arteries. Once blood with low oxygen enters the blood vessels (small tubes that carry blood) in the lungs, it branches out into smaller and smaller blood vessels, until it is distributed into tiny vessels called capillaries. The capillaries in the lungs wrap around tiny sacs called alveoli that are filled with air when a person breathes in. Carbon dioxide (CO_2) in the blood is exchanged for oxygen (O_2) through a process called gas exchange. The carbon dioxide is then exhaled from the lungs, and the now oxygenated blood flows back into the heart; first to the left atrium, which sends the blood to the left ventricle, which then pumps the blood to the entire rest of the body. This cycle is repeated with every heart beat!