

Name \_\_\_\_\_

## The Incredible Journey of Oxygen and Nutrients Through Your Body

### Short Answer Key

1. Oxygen enters the bloodstream in the lungs, where it diffuses into tiny blood vessels. Hemoglobin in red blood cells binds with oxygen, turning them bright red. The oxygen-rich blood is then pumped by the heart to body tissues.
2. The circulatory system ensures nutrient distribution by carrying nutrients absorbed from food through the bloodstream. Nutrients are delivered to body tissues through arteries and arterioles, nourishing cells and organs.
3. The heart acts as the pump, contracting rhythmically to create pressure and propel blood throughout the body via a network of blood vessels.
4. Carbon dioxide removal is essential to prevent its accumulation in the body, which can lead to respiratory acidosis and other health issues.
5. A healthy circulatory system contributes to overall well-being by ensuring the delivery of oxygen and nutrients to cells, supporting organ function, and efficiently removing waste products.

