

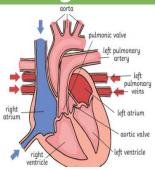
Year 6 Science- Biology

The Circulatory System/ Diet and Health

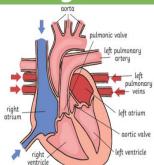
| Subject Specific | Vocabulary |
|------------------|------------|
|------------------|------------|

| <u>a</u> rteries | The blood vessels that carry oxygenated blood <u>a</u> way from the heart to the body's cells, tissues and organs. |
|------------------|---|
| blood vessels | A series of tubes inside your body. They move blood to and from your heart. |
| carbon dioxide | A gas that is formed in the tissues and eliminated (removed) by the lungs. |
| heart | The muscle that pumps blood received from veins into arteries throughout the body. |
| lungs | A pair of breathing organs located within the chest which remove carbon dioxide from and bring oxygen to the blood. |
| nutrients | Chemical compounds in food that are used by the body to function properly and maintain health. e.g. proteins, fats, carbohydrates, vitamins and minerals. |
| oxygen | A gas that your body needs to work properly. Your cells need oxygen to make energy. Your lungs absorb oxygen from the air you breathe. |
| pulse | The little thump in your arteries each time the heart beats. |
| valve | Flaps that control blood flow to and from the heart. They only allow blood to flow in one direction. |
| ve <u>in</u> | A blood vessel that carries blood <u>in</u> to the heart from tissues and organs in the body. |

Useful Diagrams



Key Knowledge



What is the circulatory system?

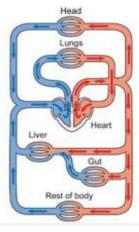
- *The circulatory system is made of the heart, lungs and the blood vessels.
- *Arteries carry oxygenated blood from the heart to the rest of the body.
- *Veins carry deoxygenated blood from the body to the heart.
- *Nutrients, oxygen and carbon dioxide are exchanged via the capillaries.



oxygenated blood



deoxygenated blood



Which choices can harm the circulatory system?

*Some choices, such as smoking and drinking alcohol can be harmful to our health.

- *Tobacco can cause short-term effects such as shortness of breath, difficulty sleeping and loss of taste as well as long-term effects. *Alcohol can cause short-term effects such as
- addiction and loss of control as well as longterm effects.

How does our body transport water and nutrients?

*Nutrients and water are absorbed in the system in the stomach, small and large intestines.

- *They enter the blood stream via the capillaries, where they are passed through to the arteries. *The blood is circulated throughout the body (including being oxygenated in the lungs and the
- heart). *Nutrients are absorbed by the cells that need them

and water is absorbed by all cells.

Why is exercise so important?

Exercise can:

- *tone our muscles and reduce fat
- *increase fitness
- *make you feel physically and mentally healthier
- *strengthen the heart
- *improve lung function
- *improve skin