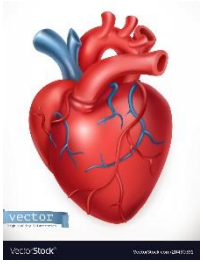
**Unit Overview – B2 Organisation**



**You will learn about:**

- The relationship between the circulatory and gas exchange systems.
- The heart, blood vessels and Coronary heart disease.
- Digestion and enzymes

**You will be able to:**

- Carry out a safe, controlled investigation to measure the rate of an enzyme under different conditions.

| **Key learning points** | |
|---|---|
| Organisational Hierarchy | |
| Digestive system | |
| Enzymes | |
| Effect of pH on enzymes Required Practical | |
| Human digestive enzymes | |
| Food tests Required practical | |
| Heart | |
| Blood vessel structure and function | |
| Coronary heart disease | |
| Blood | |
| Cancer | |
| Plant structure | |
| Plant transport systems | |

**Links to other subjects:**

SMSC:

- Evaluate risks both in practical science and the wider social context, including perception of risk in relation to data and consequences.
- Appreciate the power and limitations of science and consider any ethical issues which may arise.
- Explain every day and technological applications of science. Evaluate and make decisions based on the evaluation of evidence and arguments.

Literacy:

- Communicating the scientific rationale for investigations, methods used, findings and reasoned conclusions through paper-based and electronic reports and presentations using verbal, diagrammatic, graphical, numerical and symbolic forms.
- Use scientific vocabulary, terminology and definitions.

Numeracy

- Present and analyse the results: calculate rates of reaction using raw data and graphs.

**Key Words**

**Cell, organ, tissues, system, enzyme, lock and key theory, active site, amylase, protease, lipase, denature, stomach, hydrochloric acid, bile, alkaline, aorta, pulmonary vein, pulmonary artery, vena cava, iodine, Benedict's, Biuret, plaque, stent, statin, white blood cell, plasma, platelets, red blood cell, xylem, phloem, diffusion, osmosis, active transport.**