Year 9 Learning Journey

YEAR 10

You will learn about the structure of cells, how substances are transported in/out of cells, what is inside atoms, the patterns of elements on the periodic table, energy stores, how to calculate different types of energy.

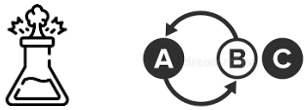
Introduction to GCSE Biology, Chemistry and Physics

Ecosystems 9.3, 9.4

1. Aerobic respiration
2. Anaerobic respiration
3. Biotechnology
4. Photosynthesis
5. Leaves
6. Investigating photosynthesis
7. Plant minerals

You will learn how the body transfers energy from food by the process of respiration. You will find out how anaerobic respiration can be useful. You will also discover how plants make their own food through photosynthesis.

Reactions 6.3, 6.4



You will learn what happens to atoms in chemical reactions. You will also find out how chemical reactions transfer energy and why chemical reactions are important.

1. Atoms in chemical reactions
2. Combustion
3. Thermal decomposition
4. Conservation of mass
5. Exothermic and endothermic reactions
6. Energy level diagrams
7. Bond energies

Electromagnets 2.3, 2.4

You will learn how to make a magnet using electricity and how to make it stronger. You will also learn about magnetic devices and how to model magnetic fields.

1. Magnets and magnetic fields
2. Electromagnets
3. Using electromagnets

Forces 1.3, 1.4

You will understand how forces acting upon an object can explain how it is moving. You will also learn about pressure in fluids, floating and sinking.

1. Friction and drag
2. Squashing and stretching
3. Turning forces
4. Pressure in gases
5. Pressure in liquids
6. Stress on solids

YEAR 9

St Michael's Catholic Academy Science