Science learning journey

Year 7

Space & Rocks
- Planets
- Seasons
- Rocks in the Earth
- Environment

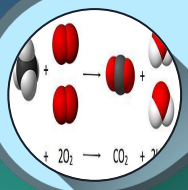
Variation & Ecology
- DNA
- Food chains
- Interdependence

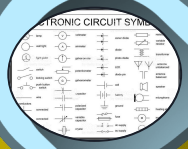
Electricity & Magnetism
- Static electricity
- Circuits
- Bills
- Magnets

The periodic table & Acids and Alkalis
- Groups & Periods
- Group 1 & 7
- Transition metals
- Neutralisation

Respiration & disease
- Exercise
- Being healthy
- Drugs

States of matter & Separating mixtures
- Solids, Liquids and gases
- Atoms, elements & compounds
- Mixtures
- Separating mixtures





Year 8

Waves
- Light
- Sound
- Electromagnetic spectrum

Chemical reactions
- Metals and acid
- Neutralisation
- Endothermic
- Exothermic

Photosynthesis and reproduction
- Photosynthesis
- Reproduction in plants and animals
- Puberty

Forces
- Friction
- Work done
- Hooke's Law

Energy
- Energy transfers
- Insulation
- Global warming

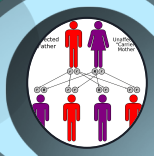
Cells and the body
- Animal & plants cell
- Microscopes
- Osmosis
- Digestion

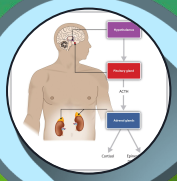
Biology learning journey

Year 11

7B Ecology
- Competition
- Adapting and surviving
- Carbon cycle
- Human impact on Earth

6B Inheritance, variation and evolution
- Types of reproduction
- Genes and DNA
- Variation
- Genetic engineering



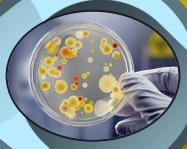


5B Homeostasis and response
- The human Nervous system
- Diabetes
- Human reproduction

4B Bioenergetics
- Photosynthesis
- Aerobic and anaerobic Respiration

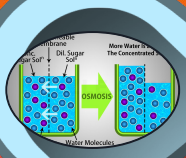
Year 10

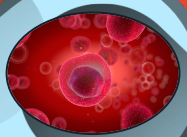
3B Infection and response
- Communicable diseases
- Preventing and treating diseases
- Non communicable diseases



2B Organisation
- Cells, Tissues, organs & organ systems
- The digestive system
- The Heart
- Transpiration

1B Cell Biology
- Animal and plant cells
- Specialisation
- Osmosis
- Cell division
- Stem cells





Year 9

Chemistry learning journey

10C Using resources

Finite & renewable resources

Treating water

9C Chemistry of the atmosphere

The history of Earth's atmosphere

Greenhouse gases

Climate change

8C Chemical analysis

Pure substances

Chromatography

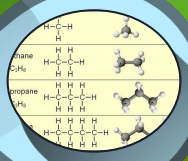
7C Organic chemistry

Hydrocarbons

Fractional distillation

Combustion

Cracking



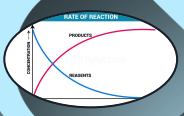
Year 11

6C The rate and change of chemical changes

Rates of reactions

Collision theory

Reversible reactions

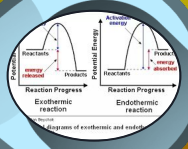


5C Energy changes

Exothermic reactions

Endothermic reactions

Reaction profiles



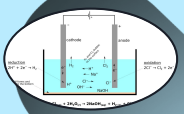
4C Chemical changes

The reactivity series

Displacement reactions

Making salts

Electrolysis



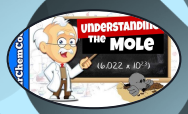
3C Quantitative chemistry

Moles

Relative atomic mases

Relative formula masses

Concentrations



Year 10

2C Bonding, structure and properties of matter

Atoms to ions

Ionic bonding

Covalent bonding

1C Atomic structure and the periodic table

The structure of atoms

Groups and periods

Trends in the table

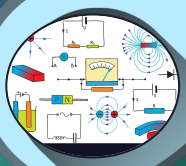
Year 9

Physics learning journey

7P Magnetism and Electromagnetism

Magnetic fields

The motor effect

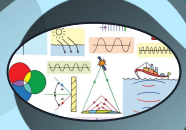


6P Waves

Reflection

Refraction

The electromagnetic spectrum



Year 11

5P Forces

Balanced and unbalanced forces

Distance, velocity and acceleration

Motion graphs

4P Atomic structure

Discovery of the nucleus

Radioactivity

Alpha, Beta and Gamma

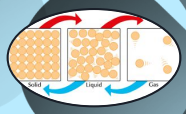
3P Particle model of matter

Density

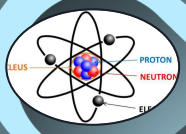
States of matter

Internal energy

Specific latent heat



Year 10



2P Electricity

Current and charge

Series and parallel circuits

Electricity in the home

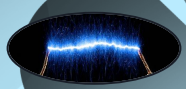
1P Energy

Conservation of energy

Efficiency

Specific heat capacity

Energy resources



Year 9