



KS3 SCIENCE Learning Journey

C2 Bonding, Structure & the Properties of Matter

- Establishment of the periodic table
- Properties of groups 1,7 & 0

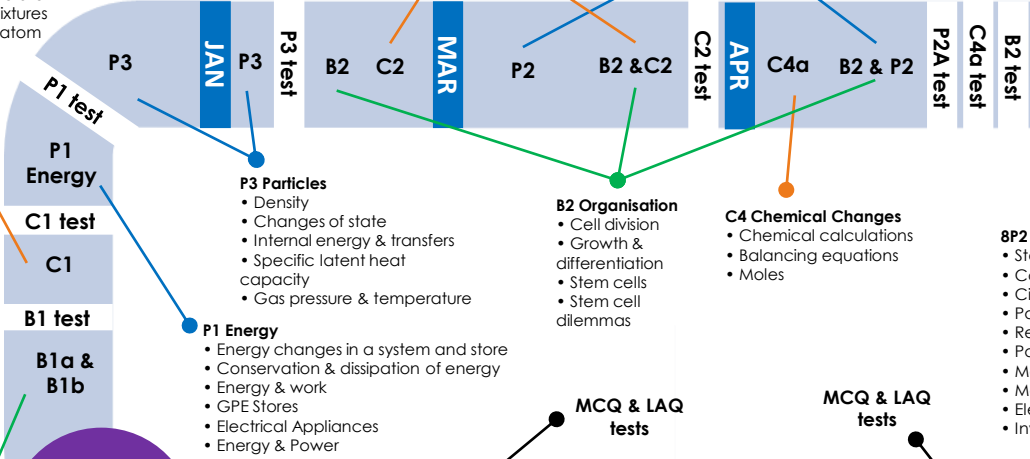
P2 Electricity A

- Alternating current
- Plugs and cables
- AC/DC
- Domestic uses & safety
- Energy transfers
- Appliances & efficiency



C1 Atomic Structure

- Structure of the atom
- Separating mixtures
- History of the atom
- Ions, atoms & isotopes



Cell Biology

- Microscopes
- Plant & animal cells
- Types of cell
- Transport in and out of cells
- Exchange surfaces
- Cell division

8P3 Motion & Pressure

- Speed
- Distance-time graphs
- Acceleration
- Speed-time graphs
- Pressure in gases, solids & liquids

8C4 The Earth

- Earth structure
- Rock types
- Rock Cycle
- Finite resources
- Man-made & natural materials
- The cycle of materials
- Environmental impact

8B3 Inheritance & Evolution

- DNA
- Role of chromosomes
- Inheritance; genetic crosses
- Variation & survival
- Natural selection
- Fossils
- Extinction
- Biodiversity

8C2 The Periodic Table

- Development of the periodic table
- Metals & Non-metals
- Group 1
- Group 7
- Trends in physical properties across a period

8C3 Metal & Acid reactions

- Reactions of metals
- Displacement reactions
- Reactivity series

7C4 Separation Techniques

- Pure & impure
- Solutions
- Solubilities
- Separating mixtures; filtering, evaporation, chromatography & distillation

MCQ & LAQ tests

7B3 Ecosystems & Plants

- Cells, tissues & organs
- Animal cells
- Plant cells
- Specialised cells

7P3 Space

- The earth
- Days, years & seasons
- The moon
- Solar system
- Gravity

8B1 Organ Systems

- Breathing; gas exchange
- The effects of disease and lifestyle
- Healthy diet
- Human digestive system

8C1 Reactions

- Formation of new substances
- Conservation of mass
- Thermal decomposition
- Oxidation
- Exo & Endo reactions
- Catalysts

8P1 Forces

- Types of forces
- Balanced/unbalanced forces
- Friction and drag forces
- Turning forces

8B2 Respiration & Photosynthesis

- Aerobic respiration
- Anaerobic respiration
- Fermentation
- Photosynthesis
- Leaves
- Movement of water in plants
- Minerals in plants

7P3 Sound & Light

Properties of waves

- Volume & pitch
- Hearing
- The ear
- Echoes & ultrasounds

7C3 Acids & Alkalis

- Acids & reactions
- Indicators
- pH scale
- Neutralisation
- Reactions involving acids & alkalis

7B2 Variation & Reproduction

- Cells, tissues & organs
- Animal cells
- Plant cells
- Specialised cells

7P1 Energy

- Energy stores
- Fuels
- Temperature
- Heating & Cooling
- Thermal conduction
- Convection
- Thermal Stores

7C1 Particles & their behaviour

- Particle theory
- States of matter
- Diffusion
- Gas pressure

7B1 Cells

- Microscopy
- Unicellular organisms
- Human skeleton
- Role of joints & muscles