









Curriculum Overview for Science

Year 7

| | | |
|---|---|--|
| <p>Half Term 1: How to Science</p> <p>Substantive Knowledge: Parts of the Bunsen burner Safety symbols Variables</p> <p>Disciplinary Knowledge: Identifying hazards Identifying variables How to draw a table Writing methods Recording time Measuring mass Measuring volume How to use a Bunsen burner Measuring temperature How to create revision resources (flash cards, revision cards and mind maps)</p> |  | <p>Article homework – reading for meaning, Model reading and highlighting to pick out key details, reading of data, Skim reading,</p> |
| |  | <p>Safety, Hazard, Independent, dependent variable, control variable, Table, variable, Method, Hypothesis, Accurate, Resolution, Volume, Meniscus, mass, Safety flame, Roaring flame, Scale, thermometer, Double- blind, trial</p> |
| |  | <p>Recall quiz x 1</p> |
| |  | <p>Reading task Recall test</p> |
| <p>Half Term 2: Fundamentals</p> <p>Substantive Knowledge: Organelles of plant and animal cells Structure and function of plant cells Parts of a microscope Hierarchy of cells, tissues, organs, organ systems, organisms Structure of an atom What elements, compound, mixture and molecules are Diagrams of state of matter Changes of state Acids and alkalis on pH scale Stores and transfers of energy. Contact and non contact forces Names of simple forces. How forces affect the motion of an object</p> <p>Disciplinary Knowledge: How to safely use a microscope How to observe cells using a light microscope Comparison of structures of cells Linking structure to function Observations of a chemical reaction Colours of pH scale – acids and alkalis Word equation Drawing a transfer chain. Drawing force diagrams. Calculating a resultant force.</p> |  | <p>Article homework – reading for meaning, Model reading and highlighting to pick out key details, reading of data, Skim reading</p> |
| |  | <p>Kinetic, gravitational potential, chemical, thermal, elastic, Nuclear Light, Sound, Heat, Forces, Electricity, Conservation of energy, transfer chains, Contact and non-contact forces, Balanced and unbalanced, resultant, Acceleration, deceleration, constant speed, Atom, subatomic particle, Element, Compound, mixture and molecules, Solid, liquid, gas Observation, Particles, Acid, Alkali Cell, organelle, chloroplast, vacuole, cell wall, magnify, microscope, eukaryotic, prokaryotic, specialised, differentiation, unicellular, organisation, organism</p> |
| |  | <p>Recall quiz x3 Termly assessment</p> |
| |  | <p>Reading task Recall test Revision for end of term assessment</p> |