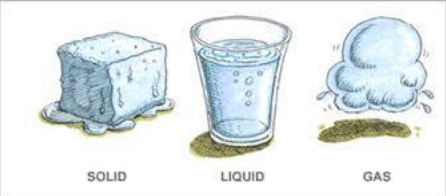
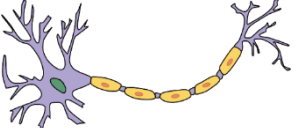
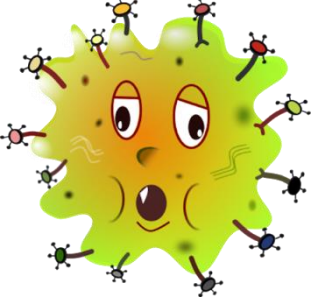
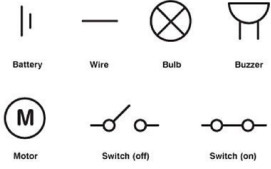
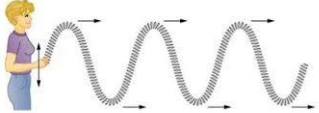



## Key Stage 3 Outline Plan

### Year 9 2020-2021

By Year 9, the Science curriculum spirals to introduce harder concepts within the same topics previously covered in Year 7 & 8. This gives a good chance to introduce revision practices and start to transition students to their GCSE studies.

| Topic  | Key words   | Working Scientifically links  |
|--|---|---|
| <p><b>Chemistry in Detail</b><br/>Featuring: States of Matter; The Periodic Table; Acids and Alkalis</p>            | <p>Particle Model<br/>Interconversions<br/>Cooling curves<br/>Elements<br/>Atomic Number<br/>Electronic Configuration<br/>pH<br/>Bases<br/>Salts<br/>Solubility</p>     | <p>Line graphs<br/>Development of a scientific theory</p>   |
| <p><b>Biology in Detail</b></p>  <p>Featuring: Cells; the Nervous System; Plant Structures and their functions</p> | <p>Microscopes<br/>Specialised cells<br/>Neurone<br/>Synapse<br/>Reflex<br/>Photosynthesis<br/>Xylem vessels</p>  | <p>Unit conversion<br/>SI units<br/>Standard form</p>   |
| <p><b>Biology in Action:</b><br/>Featuring: Communicable Diseases; Genetics; Ecosystems</p>                       | <p>Pathogen<br/>Immune System<br/>Meiosis<br/>DNA<br/>Alleles<br/>Inheritance<br/>Mutation<br/>Food web<br/>Communities<br/>Mutualism<br/>Biodiversity</p>              | <p>Scale<br/>Graph interpretation<br/>Ethical debate<br/>Investigative skills<br/>Tallys and bar charts</p> |
| <p><b>Physics in Detail:</b></p>  <p>Featuring: Energy – Forces doing work; Electricity and Circuits</p>          | <p>Power<br/>Circuits<br/>Current<br/>Potential Difference<br/>Charge<br/>Resistance<br/>Energy transfers<br/>Electrical power</p>                                      | <p>Rearranging equations<br/>Using models in science</p>  |
| <p><b>Physics in Action:</b><br/>Featuring: Waves</p>   | <p>Transverse<br/>Longitudinal<br/>Wave speed<br/>Refraction</p>  | <p>Using models in science<br/>Rearranging equations</p>  |
|  <p><b>Chemistry in Action:</b><br/>Featuring: Separation Techniques; Obtaining and Using Metals</p>              | <p>Filtration<br/>Crystallisation<br/>Paper Chromatography<br/>Distillation<br/>Potable<br/>Reactivity<br/>Displacement<br/>Ores<br/>Redox<br/>Lifecycle Assessment</p> | <p>Following written instructions</p>   |

