



QPHS Year 8 Science Curriculum Map

Half term	Title	Unit summary	Assessment
1 and 2	<p>Biology 1</p> <p>Digestive System and Healthy Living</p> <p>(Teacher 1)</p>	<p>Students will learn about:</p> <ul style="list-style-type: none"> A healthy diet and its importance. The organs in the digestive system and their functions. Healthy living; alcohol, drugs and smoking. 	<p>Demonstrate knowledge and understanding of investigative science and experimental procedures to obtain results used to make conclusions in a practical assessment on the effect of temperature on enzyme activity</p> <p>To demonstrate knowledge, apply understanding and analyse information in an end of unit test on biology 1 content with cumulative knowledge from year 7 biology 1.</p>
	<p>Chemistry 1</p> <p>The Periodic Table, Chemical Reactions and Materials</p> <p>(Teacher 2)</p>	<p>Students will learn about:</p> <ul style="list-style-type: none"> Properties of elements in different groups on the periodic table Chemical reactions; conservation of mass, combustion, thermal decomposition, exothermic and endothermic reactions Materials; ceramics, polymers and composites 	<p>Demonstrate knowledge and understanding of investigative science and experimental procedures to obtain results used to make conclusions in a practical assessment on the energy released from different types of fuels.</p> <p>To demonstrate knowledge, apply understanding and analyse information in an end of unit test on chemistry 1 content with cumulative knowledge from year 7 chemistry 1.</p>
3 and 4	<p>Physics 1</p> <p>Forces, Magnets and Pressure</p> <p>(Teacher 1)</p>	<p>Students will learn about:</p> <ul style="list-style-type: none"> Forces; Balanced and unbalanced forces, friction, work done and moments. Magnets and electromagnets and their uses. Pressure in solids and fluids. 	<p>Demonstrate knowledge and understanding of investigative science and experimental procedures to obtain results used to make conclusions in a practical assessment on how the number of coils changes the strength of an electromagnet.</p> <p>To demonstrate knowledge, apply understanding and analyse information in an end of unit test on physics 1 content with cumulative knowledge from year 7 physics 1.</p>
	<p>Chemistry 2</p> <p>Separating Techniques, the Atmosphere and Resources</p> <p>(Teacher 2)</p>	<p>Students will learn about:</p> <ul style="list-style-type: none"> Separating mixtures; filtration, evaporation, chromatography, distillation and solubility. The atmosphere and global warming. Recycling and life cycle assessments. 	<p>Demonstrate knowledge and understanding of investigative science and experimental procedures to obtain results used to make conclusions in a practical assessment on the effect of temperature on solubility.</p> <p>To demonstrate knowledge, apply understanding and analyse information in an end of unit test on chemistry 2 content with cumulative knowledge from chemistry 1 and year 7 chemistry 2.</p>
5 and 6	<p>Biology 2</p> <p>Photosynthesis, Respiration and Ecology</p> <p>(Teacher 1)</p>	<p>Students will learn about:</p> <ul style="list-style-type: none"> Aerobic and anaerobic respiration. Leaf structure and photosynthesis. Ecology; food chains, bioaccumulation, the carbon cycle, decay and biodiversity. 	<p>Demonstrate knowledge and understanding of investigative science and experimental procedures to obtain results used to make conclusions in a practical assessment on the effect of light intensity on the rate of photosynthesis.</p> <p>To demonstrate knowledge, apply understanding and analyse information in an end of unit test on biology 2 content with cumulative knowledge from year 8 biology 1 and year 7 biology 2.</p>
	<p>Physics 2</p> <p>Heat Transfers and Waves</p> <p>(Teacher 2)</p>	<p>Students will learn about:</p> <ul style="list-style-type: none"> Heat transfers; conduction, convection and radiation. Types of waves and the wave equation. Sound, ultrasound and the ear. 	<p>Demonstrate knowledge and understanding of investigative science and experimental procedures to obtain results used to make conclusions in a practical assessment on the effects of different insulating materials.</p> <p>To demonstrate knowledge, apply understanding and analyse information in an end of unit test on physics 2 content with cumulative knowledge from year 8 physics 1 and year 7 physics 2.</p>