



QPHS Year 7 Science Curriculum Map

Half term	Title	Unit summary	Assessment
1	Science Skills	Students will learn about: <ul style="list-style-type: none"> Risk assessments and equipment Writing methods and variables Presenting results in tables and graphs 	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 materials on the height a ball bounces.
1	Physics 1 Energy & Electricity	Students will learn about: <ul style="list-style-type: none"> Energy; transfers, resources and costs. Electricity; circuits, current, voltage and resistance. Static electricity. 	Demonstrate knowledge and understanding of investigative science and experimental procedures to obtain results used to make conclusions in a practical assessment on electrical conductors and insulators. To demonstrate knowledge, apply understanding and analyse information in an end of unit test on physics 1 content.
2	Chemistry 1 The Particle Model & Atoms	Students will learn about: <ul style="list-style-type: none"> The particle model; solids, liquids and gases. Atoms, elements, compounds and writing chemical equations. 	Demonstrate knowledge and understanding of investigative science and experimental procedures to obtain results used to make conclusions in a practical assessment on the cooling of stearic acid. To demonstrate knowledge, apply understanding and analyse information in an end of unit test on chemistry 1 content.
3	Biology 1 Cells, Organs & Organ systems	Students will learn about: <ul style="list-style-type: none"> Cells; structure of animal and plant cells, studying cells with microscopes and diffusion. Function of organ systems; muscular, skeletal, breathing and circulatory system. 	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 surface area on time for diffusion. To demonstrate knowledge, apply understanding and analyse information in an end of unit test on biology 1 content.
4	Chemistry 2 pH scale, Metal Reactions & Rocks	Students will learn about: <ul style="list-style-type: none"> pH scale; acids and alkalis, neutralisation and making salts. Reactions involving metals with acids, oxygen and displacement reactions. Rocks; the earth's structure, sedimentary, igneous, metamorphic and the rock cycle. 	Demonstrate knowledge and understanding of investigative science and experimental procedures to obtain results used to make conclusions in a practical assessment on reactivity of different metals with acid. To demonstrate knowledge, apply understanding and analyse information in an end of unit test on chemistry 2 content with cumulative knowledge from chemistry 1.
5	Physics 2 Motion & Space	Students will learn about: <ul style="list-style-type: none"> Describing motion; calculating speed, distance-time graphs and acceleration. Space physics; mass and weight, our place in the universe, seasons and phases of the moon. 	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 ramp height on speed. To demonstrate knowledge, apply understanding and analyse information in an end of unit test on physics 2 content with cumulative knowledge from physics 1.
6	Biology 2 Reproduction, DNA, Variation and Extinction	Students will learn about: <ul style="list-style-type: none"> Reproductive systems in animals and plants; organs, pregnancy, menstrual cycle, pollination and seed dispersal. Discovery of DNA structure, variation, adaptations, evolution and extinction. 	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 seed size on distance of seed dispersal. To demonstrate knowledge, apply understanding and analyse information in an end of unit test on biology 2 content with cumulative knowledge from biology 1.