BENSHAM MANOR School

Science Year 10 Entry Level Curriculum Map 2026-27

Topic Title	Topic overview	Knowledge and Skills	Assessment	Key Words
Autumn Term **1) Chemical products used in the home and their environmental impact.**	This unit aims to help learners to appreciate that there are a range of chemical products used in the home and that the disposal of these materials can have an impact on the environment. • Different types of chemical products used in the home. • Raw materials that make up different chemical products. • Chemical products and their environmental impact.	• Identify different chemical products used in the home. • Classify different types of chemical products • Link the properties of chemical products to their use. • Identify uses of acids and bases. • Identify acids and alkalis using simple tests. • Work safely in the laboratory. • Know what to do if there is a spillage of acid or alkali • Identify the pH of certain chemical products found in the home. • Identify raw materials that can be used to produce useful chemicals. • State some harmful effects that different chemical products can have on the environment. • Identify chemical products in household waste that can be recycled. • Identify advantages of recycling waste. • Identify how certain chemical products can be disposed of. • Explain the need to use raw materials sustainably	Teacher assessment through a variety of activities - quizzes, word wall, games, questioning, role play, speaking activities, card sorts, photographs of learners carrying out activities, storyboards, presentations/posters, evaluation sheets and testing.	product raw material properties organic inorganic mixture salt acid alkali neutral neutralisation pH scale universal indicator litmus paper sustainable
Spring Term **2) Making Useful Compounds**	This unit aims to help learners to use simple laboratory equipment to prepare useful chemicals and gain an understanding of the chemistry behind the reactions they have used. • Acids and alkalis • Neutralisation • Hazard symbols • Preparation of useful chemical compounds	• Name the hazards and give the meanings. • Identify hazards associated with different chemicals. • Understand the pH scale. • Identify key items of laboratory equipment. • Use simple laboratory equipment. • Describe neutralisation. • Identify uses of neutralisation reactions. • Safely use equipment and chemicals. • Prepare salts and record results from preparation.	Teacher assessment through a variety of activities - quizzes, word wall, games, questioning, role play, speaking activities, card sorts, photographs of learners carrying out activities, storyboards, presentations/posters, evaluation sheets and testing.	acid alkali neutral neutralisation pH scale universal indicator word equation reactants products hazard measuring cylinder pipette evaporating dish

<u>Summer Term</u> **3) Science and the Universe**	This unit enables learners to explore themes connected with space and our Universe. ● Our Solar System. ● Types of galaxies. ● Electromagnetic spectrum ● Space exploration ● Factors that affect the surfaces of planets and moons.	● Describe the solar system using models. ● Define a galaxy and identify different types of galaxies. ● Define the electromagnetic spectrum. ● Name parts of the electromagnetic spectrum. ● Identify images of the sun using different parts of the electromagnetic spectrum. ● State advantages of using space-based telescopes over earth-based telescopes. ● Identify the essential parts of a spacesuit and describe how they keep an astronaut alive (e.g., providing oxygen, controlling temperature). ● Classify items astronauts can eat in space versus items that are unsafe or impractical (e.g., sticky foods vs. crumbly foods that create floating debris). ● Compare daily tasks—like washing, sleeping, and exercising—on Earth versus how astronauts perform them in microgravity. ● State how craters have formed on the moon and on planets ● Identify how different factors have affected the surface of planets and moons ● Investigating the factors that affect the formation of a crater.	Teacher assessment through a variety of activities - quizzes, word wall, games, questioning, role play, speaking activities, card sorts, photographs of learners carrying out activities, storyboards, presentations/posters, evaluation sheets and testing.	planets Mercury Venus Earth Mars Jupiter Saturn Uranus Neptune dwarf planet asteroids orbit atmosphere model galaxy moon star sun comet satellite telescope Universe astronaut gravity crater