

BMS Science - Year 10 School Curriculum Map - 2024- 2025

Topic Title	Topic overview	Knowledge and Skills	Assessment	Key Words
<u>Autumn Term</u> 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. - 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
<u>Spring Term</u> 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. - Saely 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. • Know about the structure of galaxies and our Solar System. • Know about galaxies and our Solar System • Know how we can find out about the Universe. • Know ways of finding out about the Universe. • Know factors that affect the surfaces of planets and moons.	• Describe the solar system • Define a galaxy and Identify different types of galaxies. • Identify images of the sun using different parts of the electromagnetic spectrum. • State advantages of using space based telescopes over earth based telescopes. • State how craters have formed on the moon and 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 crater
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