Curriculum intent (overview) – To deepen students' skills and knowledge through a broad and balanced curriculum which prepares students for adulthood.

3Q1/2/3 - Quest Curriculum – *Science 4 Lessons Weekly*

To access SoW click the hyperlink for each topic

Year	2024 – 2025 Autumn 1	2024 – 2025 Autumn 2	2024 – 2025 Spring 1	2024 – 2025 Spring 2	2024 – 2025 Summer 1	2024 – 2025 Summer 2
	Topic: Intro to lab B Body parts and senses (E) **Suggested Key Questions:** **What are the common scientific equipment?** **How do we work safely in the lab?** **How do we sense the world around us?** **Key Skills and Knowledge:** **Intro to Lab** • Pupils to know the Laboratory rules and to start abiding by them. • Pupils to see, handle and name some of the commonly used science apparatus. • *Pupils to practise drawing science apparatus correctly.* • *Pupils to practise turning a Bunsen burner off and on correctly, and*	**Topic:** **C** Exploring senses. **P** Electricity (D) **Suggested Key Questions:** **Why do we have senses?** **What is electricity and why is it needed?** **Key Skills and Knowledge:** **C Exploring senses** • To experience a range of properties of everyday objects using all senses. • To be able to identify some similarities between materials. • To be able to identify some differences between materials. • To begin to develop the skill of observing.	**Topic:** B Keeping Healthy (E) **Suggested Key Questions:** **How can we stay healthy?** **Key Skills and Knowledge:** **B Keeping healthy** • To know about the importance of food and water to humans. • To be able to distinguish between healthy and less healthy foods. • To be able to recognise the need for a variety of foods and exercises. • To be able to plan a healthy meal.	**Topic:** **C** Changing, **P** Light (D) **Suggested Key Questions:** **How do materials change?** **What are some sources of light?** **Key Skills and Knowledge:** **C Changing** • To experience, using all the senses, a variety of materials for squishiness, bendiness, twistability and stretchiness. • To be able to explore a range of changes when materials are heated, cooled or made wet. • To begin to comment on, and	**Topic:** B Life Cycle Growth, P Forces (D) **Suggested Key Questions:** **What are the stages of the human life cycle?** **What are forces?** **Key Skills and Knowledge:** **B Life Cycle Growth** • To encounter different stages in human life cycle. • To indicate some awareness of different stages in human life cycle e.g. simple role-play – pretend to cry when shown picture of baby. • To be able to name 3 different stages in human life cycle. • To begin to develop the skill of discussing.	**Topic:** C Acids and alkalis (E) **Suggested Key Questions:** **What are acids and alkalis?** **Key Skills and Knowledge:** **C Acids and alkalis** • To be aware that many everyday chemicals and foods contain acids • To understand that acids can burn you and can be dangerous • To know that we must wear goggles when using acids • To recognise common hazard symbols associated with acids

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	changing the type of flame. • *Pupils to be able to use a microscope, thermometer and measuring equipment correctly.* **B Body parts and senses** • To be able to name the external parts of the body. • To associate parts of the body with particular functions. • To be able to suggest what is inside the body. • To be able to explore the 5 senses practically. • To know which organs are associated with which sense. • To know the importance of senses in survival. **Key Skills:** Begin to make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers.	**P Electricity** • To know that electricity can be dangerous. • To know that electricity can produce light, heat, sound, movement. • To be able to connect given circuit components to light the bulb/make the buzzer sound. **Key Skills:** Identify and classify with some support. *To begin to use simple secondary sources to find answers.* Begin to talk about what they have found out and how they found it out. Use some simple scientific language.	• To be able to differentiate between different kinds of exercise. • To know that food is needed for growth, health and activity. • To be able to group foods simply e.g. *fillers, fruit/vegetables, dairy, meat/fish, fatty etc.* • To know that food is vital for energy, growth and health. • To be able to test for starch and fat. • To be able to group foods according to carbohydrate, protein, fat, vitamins and minerals. • To be able to describe the process of digestion • To be able to label the main parts of the digestive system **Key Skills:** Begin to recognise when a simple fair test is necessary and help to decide how to set it up. Gather, record, and begin to classify and present data in a variety of ways to	record simply, their observations. **P Light** • To experience light and dark. • To be able to select light sources e.g. torch, candle, from tray of mixed objects. • To be able to describe or indicate features of night-time • To be able to name some sources of light. • To explore some aspects of shadows. **Key Skills:** Ask simple questions about the world around us. Use simple observations and ideas to suggest answers to questions. Perform simple tests with support. To begin to discuss my ideas about how to find things out. Begin to record simple data.	**P Forces** • To experience a range of pushes and pulls. • To be able to demonstrate a range of pushes and pulls. • To be able to describe, using some scientific vocabulary, a range of pushes and pulls. To begin to develop the skill of planning. **Key Skills:** Begin to recognise that questions can be answered in different ways. To observe simple changes over time and, with guidance, begin to notice patterns and relationships. Perform simple tests with support. To begin to discuss my ideas about how to find things out. Begin to record and communicate their findings in a range of ways.	• To observe the effect of acids on bicarbonate of soda • To use litmus paper as a more sophisticated method of detecting an acid • To use the term "indicator" when describing an acid • To recall that the opposite to an acid is an alkali • To understand that a substance that is neither acidic nor alkaline is called neutral • To know that tap water is (more or less) neutral • To know that we can make an acid neutral if we add an alkali • To understand that we can use neutralisation to treat bee stings wasp stings and indigestion. **Key Skills:** Begin to identify differences, similarities or changes related to simple scientific ideas and processes. Use simple secondary sources to find answers.

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			help in answering questions.			
Links to Gatsby Benchmarks:	Benchmark 3 – Addressing the needs of the student and * - Personal Guidance Students to consider what skills are needed to be a doctor/ nurse / medical professional … lead onto looking at what skills are needed for different roles they are interested in and what qualifications.	Benchmark 4 – Linking Curriculum to learning Students to consider what skills are needed to be an electrician. Why is it important to be safe around electrical wires / equipment? To understand the importance that all live parts of electrical equipment are inaccessible during operation.	Benchmark 3 – Addressing the needs of the student and * - Personal Guidance Students to consider what skills are needed to be engineer / site engineer … lead onto looking at what skills are needed for different roles they are interested in and what qualifications.	Benchmark 4 – Linking Curriculum to learning Students to consider what skills are needed to be a surgeon / doctor / physiotherapist. To know the names of body parts and understand the uses of them.	Benchmark 3 – Addressing the needs of the student and * - Personal Guidance Students to consider what skills are needed to be a doctor / Otorhinolaryngology / dietician / Exercise physiologist., Fitness Centre manager. Personal trainer, Sport therapist … lead onto looking at what skills are needed for different roles they are interested in and what qualifications.	Benchmark 2, – Learning from the Career and Labor Market information. Benchmark 3 – Addressing the needs of the student and * - Personal Guidance Benchmark 6 – Experience of Work places Students to consider what skills are needed to access the opportunities they are interested in. Looking at careers in sports and researching sports.