

Curriculum drivers: The curriculum is underpinned by the school's Curriculum Drivers: **Community**, **Communication** and **Consolidation**. The spiritual, moral, social and cultural development of our pupils and their understanding of the core values of our society are also woven through the curriculum and developed through 'The Heatherlands Way' values of independence, resilience, motivation, aspiration and respect. The curriculum also consolidates the fundamental British values of democracy, the rule of law, individual liberty, and mutual respect and tolerance of those with different faiths and beliefs.

We have identified the key concepts or overarching ideas within each subject. To enable the children to access them, we call these the 'Big Ideas'.

<p>Key knowledge and skills</p> <p>History <i>Big ideas: chronology, innovation & impact</i></p> <p>Key Question: How has transport changed? (<i>Changes within living memory comparing aspects of change in national life.</i>)</p> <ul style="list-style-type: none"> Understand how technology has impacted upon vehicle design over time (chronology, innovation, impact) Compare old and new cars. (innovation) Explain the impact of the development of vehicles, e.g. travel, pollution, commuting, money. (impact, innovation) <p>Chronology</p> <ul style="list-style-type: none"> Sequence events on a timeline. Sequence photos from different periods of their life. <p>Range and depth of historical knowledge</p> <ul style="list-style-type: none"> Find out about people and events in other times. <p>Interpretations of History</p> <ul style="list-style-type: none"> Compare pictures or photographs of people or events in the past. Identify different ways to represent the past. Understand basic cause and effect. <p>Historical Enquiry</p> <ul style="list-style-type: none"> Use a source – why, what, who, how, where to ask questions and find answers. Use time lines to order given events. Discuss the effectiveness of sources of information. COMMUNICATION Recognise how some sources are more than reliable than others. 	<p>Key knowledge and skills</p> <p>Science – see separate planning <i>Big ideas: Investigation, explanation, observation</i></p> <p>Enquiry: How can animals be grouped based on their needs for survival?</p> <ul style="list-style-type: none"> Know what is meant by the term offspring (explanation) Describe a selection of lifecycles (explanation) Understand that animals, including humans have offspring which grow into adults (observation, explanation) Know what the basic needs for survival are (water, food, air) (explanation) Know why we need food, water and air to survive (observation, explanation) Know what would happen if 1 or more essential was taken away (observation, explanation) Know where to find the essentials in different environments (observation, explanation, investigation) Know why exercise is important to humans (PSHE/PE) (observation, explanation) Know about different types of food and nutrition (PSHE/DT) (observation, explanation) Know how to balance a diet (PSHE/DT) (observation, explanation) Know how to stay healthy and hygienic (PSHE) (observation, explanation) <p>SC1:</p> <ul style="list-style-type: none"> Ask simple questions and recognise that they can be answered in different ways
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Oracy

- Ask relevant questions to extend their understanding and knowledge.
- Talk about the car they have made – respond to conversations

- Observe closely, using scientific equipment (**observation**)
- Perform tests to identify and classify (**investigation**)
- Use observations and ideas to suggest answers to questions (**explanation**)
- Gather and record data to help in answering questions **COMMUNICATION**

DT

Big ideas: Design, problem solving, skills & expertise

- Identify a purpose for what they intend to design and make, working to a specific design criteria. (**design, problem solving**)
- Design functional and appealing products for themselves and other users, such as a wheeled vehicle based on design criteria. (**design, problem solving**)
- Draw on their own and others' experiences to generate their ideas and solve any problems. (**design, problem solving**)
- Use talk, pictures, labelled drawings and templates to model and communicate ideas. (**design**)
- Explore and evaluate moving cards, cars, finger puppets and discuss their features/effectiveness, suggesting ways in which they could be improved and why. (**design, problem solving, skills and expertise**)
- Discuss their own ideas with confidence, explaining what they like about them and how they fit the agreed design criteria (**design, problem solving**)
- Explore and use wheels and axles as mechanisms in their own vehicles. (**problem solving, skills and expertise**)
- Build structures, exploring how they can be made stronger, stiffer and more stable, understanding that the shape of the structure affects its strength. (**problem solving, skills and expertise**)
- Compare their final outcome with their design, the design criteria and make a decision about their success. (**design, problem solving, skills and expertise**)

Computing (see separate planning)

Big ideas: coding, design & online safety

Coding

- Create a computer program using an algorithm. (**design, coding**)
- Understand ways that the collision detection event can be used in a program. (**coding**)
- Design a program that follows a timed sequence. (**design, coding**)

	<ul style="list-style-type: none"> • Understand that different objects have different attributes (properties). (design, coding) • Understand the function of button objects in a program. (design, coding) • Understand the importance of testing and debugging. (design, coding)
<p>Key vocabulary: Transport, vehicle, compare, order, change, time, past, future, development, purpose, features, cause, effect, Wright Brothers, technology, travel, advancements, pollution, electric cars, climate change, net zero</p>	<p>Offspring, life cycles, humans, animals, needs, survival, water, oxygen, environment, habitat, diet, exercise, nutrition, diet</p> <p>Axles, model, structure, stable, design, vehicle, build, test, evaluate, redevelop, purpose, strength, speed, surface, efficient</p> <p>Algorithm, collision detection, coding, program, attributes, properties, function, buttons, testing, debugging</p>
<p>Previous linked learning to consolidate: 'The Great Escape' historical study of the Great Fire of London and the cause and effect Year 2</p> <p>What comes next? Chronology and cause and effect in Stone Age, Bronze age and Iron Age 'From Stone to Rome' Year 3</p>	