

**Design & Technology Overview**

**Cycle A 2023 – 2024**

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| Term | **Years 1/2** | **Years 3/4** | **Years 5/6** |
| Autumn | **Textiles: Sewing**  Christmas  Christmas stocking. Use a running stitch to join material. | **Mechanical Systems**  Christmas  Create a Christmas toy soldier using pneumatics: syringe, tubing, balloons and cardboard for the main body. Add decoration. | **Textiles**  How do Volcanoes Effect the People Who Live on Hiemaey?  3D Volcano. Design and create a volcano with a central vent using a variety of materials such as card, tissue, newspaper, papier mache, and decorate. Test for volcanic reaction using fizzy pop and Mento sweets. |
| Spring | **Mechanical Systems**  Great Fire of London  Create a moving fire engine using wheels and axles. | **Electrical Systems**  Animals & Sustainability  Create a battery powered lamp or lantern for rangers on an animal reserve. Consider reusable / recyclable materials to use. Create a simple circuits and switches including programming and control. | **Electrical Systems**  Earth and Space  Create a moon buggy. Use simple and parallel circuits to make the vehicle move and produce light for astronauts / scientists to work on the moon. |
| Summer | **Cooking and Nutrition**  Victorians  Preparing and cooking fruits and vegetables for a picnic. | **Cooking and Nutrition**  Bronze Age  Bread. Children use a basic bread recipe. | **Cooking and Nutrition**  National Parks  Picnic. Design a healthy, balanced picnic of savoury sandwiches and vegetable snacks, and fruit and a sweet snack. Eat outdoors! |

**Cycle B 2022 – 2023**

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| Term | **Years 1/2** | **Years 3/4** | **Years 5/6** |
| Autumn | **Cooking and Nutrition**  Countries of the world  Leek & potato soup:  Make a typical British soup (leek and potato, or winter vegetable). Compare with other tastes from a Brunei / Malaysian influence. | **Textiles**  Christmas  Sewing. Create a Christmas tree decoration / decorate to attach to a Christmas jumper. Design a decoration and use a variety of stitches: running stitch (reinforce from KS1), back stitch, cross stitch, blanket stitch. | **Mechanical systems**  Battle of Britain  Cams / gears / pulleys. To design and produce an aircraft with propellers. |
| Spring | **Mechanical systems:**  Easter  Hinge and lever card. Create an Easter design (bunny / egg etc) that has a moving part (ears, tongue, arm). | **Cooking and Nutrition**  Easter  Biscuits. Children to design and make biscuits with an Easter influence. Dragons’ Den style evaluation. | **Cooking and Nutrition**  Windrush  To taste and make Caribbean food. |
| Summer | **Structures**  Pirates  Design and make a treasure chest. Use wood and cardboard to make a basic box and lid with a hinge to join. Children design and decorate the box and fill with treasure! | **Structures**  Vikings  Design and make a Viking ship using lollysticks. Children to use tools (saw, bench hook, sand paper) for accurate shaping and length.  <https://www.teachengineering.org/>  activities/view/cub\_viking\_ship\_lesson01 | **Structures**  Ancient Greece  To design and build a Trojan Horse. |

\*See DT Progression of Skills for the specific skills per topic that should be covered.\*