

| ACORNS  |                                                                                                                      |                                                                                                                      |                                                                                   |
|---------|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Cycle A | <b>How can I make an object move?</b><br>Create a moving object about space using simple slider and level mechanisms | <b>Where does our food come from?</b><br>Exploring fruit and vegetables from around the world - making a fruit salad | <b>What placemat would royalty need?</b><br>Design and make a fabric placemat     |
|         | Mechanisms - sliders & levers                                                                                        | Food - preparing fruit and vegetables                                                                                | Textiles - templates and joining techniques                                       |
| Cycle B | <b>How can I make a moving toy?</b><br>Design and make a new toy for ??? using wheels and axles                      | <b>How can I keep an animal safe?</b><br>Design and make an enclosure to keep an animal safe                         | <b>What vegetables can be used in salad?</b><br>Design and make a vegetable salad |
|         | Mechanisms - wheels & axles                                                                                          | Structures - free standing structures                                                                                | Food - preparing fruit and vegetables                                             |

| WILLOWS |                                                                                                                                                                       |                                                                                                                                               |                                                                                              |
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| Cycle A | <b>How can I make a moving book?</b><br>Create a class book that has a mixture of sliders and levers - can the children create a page that has both mechanisms in it? | <b>How can fruit and vegetables be used in products?</b><br>Exploring products that use raw fruit and vegetables - design and make a smoothie | <b>What outfit would my superhero wear?</b><br>Design and make an outfit                     |
|         | Mechanisms - sliders & levers                                                                                                                                         | Food - preparing fruit and vegetables                                                                                                         | Textiles - templates and joining techniques                                                  |
| Cycle B | <b>What vehicle can I create?</b><br>Design and make a vehicle that could of helped in the great fire of London                                                       | <b>How can I make a stable bridge?</b><br>Explore how to make bridges using different materials                                               | <b>How can I make a healthy snack?</b><br>Design and make healthy fruit and vegetable kebabs |
|         | Mechanisms - wheels & axles                                                                                                                                           | Structures - free standing structures                                                                                                         | Food - preparing fruit and vegetables                                                        |

| ELMS    |                                                                                                                                                 |                                                                                                                       |                                                                                                                                 |
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| Cycle A | <b>What can I include in a healthy packed lunch?</b><br>Designing and making a healthy sandwich<br>Discussing other items in the packed lunch   | <b>How can I use pneumatics to create movement?</b><br>Design and make a dragon using pneumatics to create a movement | <b>How can I create a purse/ wallet?</b><br>Design and make a purse/ wallet for themselves with a fastening and embellishments. |
|         | Food - healthy and varied diet                                                                                                                  | Mechanical Systems - pneumatics                                                                                       | Textiles - 2D shape to 3D product                                                                                               |
| Cycle B | <b>What can I include in my lunch instead of sandwiches?</b><br>Designing and making a healthy lunch alternative - design and make healthy dips | <b>How can I use pneumatics in a design?</b><br>Design and make a mascot for a character in How to Train Your Dragon  | <b>How do I create a pencil case?</b><br>Design and make a pencil case with a fastening and decorative techniques               |
|         | Food - healthy and varied diet                                                                                                                  | Mechanical Systems - pneumatics                                                                                       | Textiles - 2D shape to 3D product                                                                                               |

| SYCAMORES |                                                                                                                |                                                                                        |                                                                                                                 |
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| Cycle A   | How can I make an electronic moneybox?<br>Design and make a product using crumble to program and control it    | What is seasonality and how does it affect the food we eat?<br>design and make soup    | How do cams make things move?<br>Design and make a window display                                               |
|           | Electrical Systems - simple programming and control                                                            | Food - culture & seasonality                                                           | Mechanical Systems - Cams                                                                                       |
| Cycle B   | How can levers and linkages be used?<br>Create a Christmas card for their family that uses levers and linkages | How can I create a desk tidy?<br>Design and make a desk tidy - they can choose who for | How can I design and control a nightlight?<br>Design and make a product using crumble to program and control it |
|           | Mechanisms - levers and linkages                                                                               | Structures - shell structures with CAD                                                 | Electrical Systems - simple programming and control                                                             |

| OAKS    |                                                                                                             |                                                                                                  |                                                                                                                                                                                                                                                       |
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| Cycle A | How can I use CAD in the design process?<br>Design and make fabric slippers using CAD.                      | How can I use frame structures in my design?<br>Design and make a structure for a new settlement | How has migration/ transport affected food choice in Britain?<br>Discuss seasonality and how transport has impacted this/ diets have changed with the introduction of new cultures to Britain.<br>Design and make different pizzas - adapting recipes |
|         | Textiles - using CAD in textiles/ combining different fabric shapes                                         | Structures - frame structures                                                                    | Food - culture & seasonality                                                                                                                                                                                                                          |
| Cycle B | How can I use CAD in the design process?<br>Design and create a bag that includes pocket(s) and fastenings. | How can pulleys and gears be used in a product?<br>Design and make a new fairground ride         | How did the war affect food in Britain?<br>Explore the impact of rationing and seasonality on the community in Britain.<br>Design and make biscuits - adapting recipes                                                                                |
|         | Textiles - using CAD in textiles/ combining different fabric shapes                                         | Mechanical Systems - pulleys/ gears                                                              | Food - culture & seasonality                                                                                                                                                                                                                          |