| KS1 | | Term 1 | Term 2 | Term 3 | Term 4 | Term 5 | Term 6 |
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| Year 1 | | Me Myself and I | Celebrations | Happily Ever After | Amazing Animals | Roots, Shoots and Juicy Fruits | Land Ahoy |
| | Unit | | | Structures<br><br>Castle Design | | Food and Nutrition- Prepare<br><br>Fruit/Veg Smoothies? | Mechanisms- levers (hinges)<br><br>Pirate lunchbox |
| | Brief | | | To build a strong castle. | | To prepare healthy smoothies using fruit and vegetables.<br><br>https://www.kapowprimary.com/subjects/design-technology/key-stage-1/year-1/cooking-and-nutrition-smoothies/ | To create a practical lunchbox for a pirate at Sea! |
| | NC Objectives: | | | **Research:**<br>To be able to understand how a product works and how it is used.<br><br>**Design/Plan:**<br>To be able to use a range of different techniques for joining materials.<br><br>To be able to generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.<br><br>**Make:**<br>To be able to select from and use a range of tools and equipment to perform practical tasks (for | | **Research:**<br>To be able to understand what a product is and who it is for.<br><br>To be able to explore and evaluate a range of existing products.<br><br>**Design/Plan:**<br>To be able to select from and use a wide range of ingredients according to their characteristics. (taste, smell, texture)<br><br>**Make:**<br><br>To be able to select from and use a range of tools and equipment to perform practical tasks (cutting). | **Research:**<br>To be able to understand how a product works and how it is used.<br><br>To be able to identify where you might find this product.<br><br>**Design/Plan:**<br>To be able to use a range of different techniques for joining materials.<br><br>To be able to generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.<br><br>**Make:** |

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| | | | | example, cutting, shaping, joining and finishing).<br><br>To be able to select from and use a wide range of materials and components, including construction materials, according to their characteristics.<br><br>**Evaluate:**<br>To be able to explore and evaluate a range of existing products. (could be used in research lessons)<br><br>To evaluate their own ideas and products against design criteria.<br><br>**Technical Knowledge:**<br>To be able to build structures, and explore how they can be made stronger, stiffer and more stable. | | **Evaluate:**<br>To evaluate their own ideas and products against design criteria.<br><br>**Cooking and Nutrition:**<br>To be able to understand where food comes from. (covered in launch?)<br><br>To know the basic principles of healthy and varied diet to prepare dishes. (covered in Jigsaw) | To be able to select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing).<br><br>To be able to select from and use a wide range of materials and components, including construction materials, according to their characteristics.<br><br>**Evaluate:**<br>To be able to explore and evaluate a range of existing products. (could be used in research lessons)<br><br>To evaluate their own ideas and products against design criteria.<br><br>**Technical Knowledge:**<br>To be able to explore and use mechanisms (levers-hinges) in their products. |
| | **Example** | | | Local castles:<br>Whitstable<br>Rochester<br>Walmer<br>Dover | | Kids smoothie recipes widely available online: https://www.bbcgoodfood.com/recipes/collection/kid | See Twinkl planning to adapt for SMC |

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| | | | |  | | s-smoothie-recipes  | |
| | Cross-curricular coverage | | | | | To be able to understand where food comes from (Term 4- Launch lesson)<br>To know the basic principles of healthy and varied diet to prepare dishes. (Jigsaw-Healthy Me) | |
| Year 2 | | The Big Smoke | London's Burning | Australia- Aboriginal | Australia- Geog | Down at the Bottom of the Garden | Ocean Explorers |
| | Unit | | Mechanisms- wheels and axels<br><br>Fire of London- Fire engines | | Food and Nutrition<br><br>Healthy Wraps<br><br>https://www.kapowprimary.com/subjects/design-technology/key-stage-1/year-2/cooking-and-nutrition-balanced-diet/ | Structures<br><br>Bug Hotels | |
| | Brief | | To make a fire engine with functioning wheels. | | To select and prepare healthy ingredients for a balance packed lunch wrap. | To construct a hotel for insects in the school grounds | |
| | NC Objectives: | | **Research:**<br>To be able to understand how a product works and how it is used.<br><br>To be able to identify where you might find this product. | | **Research:**<br>To be able to understand what a product is and who it is for.<br><br>To be able to explore and evaluate a range of existing products. | **Research:**<br>To be able to understand how a product works and how it is used.<br><br>**Design/Plan:** | |

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| | | | To be able to identify the materials used to make a product.<br><br>To be able to express an opinion about a product.<br><br>**Design/Plan:**<br>To be able to use a range of different techniques for joining materials.<br><br>To be able to use materials and tools with care and precision.<br><br>To be able to design purposeful, functional and appealing products for themselves and other users based on design criteria.<br><br>To be able to generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.<br><br>**Make:**<br>To be able to select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing).<br><br>To be able to select from and use a wide range of materials and components, including construction materials, textiles and | | **Design/Plan:**<br>To be able to select from and use a wide range of ingredients according to their characteristics. (taste, smell, texture)<br><br>**Make:**<br><br>To be able to select from and use a range of tools and equipment to perform practical tasks (for example, peeling, cutting, grating, mashing).<br><br>**Evaluate:**<br>To evaluate their own ideas and products against design criteria.<br><br>**Cooking and Nutrition:**<br>To be able to understand where food comes from. (covered in launch?)<br><br>To know the basic principles of healthy and varied diet to prepare dishes. (covered in Jigsaw) | To be able to use a range of different techniques for joining materials.<br><br>To be able to generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.<br><br>**Make:**<br>To be able to select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing).<br><br>To be able to select from and use a wide range of materials and components, including construction materials, according to their characteristics.<br><br>**Evaluate:**<br>To be able to explore and evaluate a range of existing products. (could be used in research lessons)<br><br>To evaluate their own ideas and products against design criteria.<br><br>**Technical Knowledge:**<br>To be able to build structures, and explore how they can be made stronger, stiffer and more stable. | |

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| | | | ingredients, according to their characteristics.<br><br>**Evaluate:**<br>To be able to explore and evaluate a range of existing products.<br><br>To evaluate their own ideas and products against design criteria.<br><br>**Technical Knowledge:**<br>To be able to build structures, and explore how they can be made stronger, stiffer and more stable.<br><br>To be able to explore and use mechanisms (sliders, wheels and axles) in their products. | | | | |
| | **Example** | |  | |  |  | |
| | **Cross-curricular coverage:** | | | | | | |

| LKS 2 | | Term 1 | Term 2 | Term 3 | Term 4 | Term 5 | Term 6 |
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| Year 3 | | Viva Espana | Surviving the Stone Age | It's All Greek | Angry Earth | Kings, Knights and Battles | Faversham and Beyond – Explosive Nature |
| | Unit | Food and Nutrition- Prepare and Cook, Eating Seasonally<br><br>Spanish Omelettes (Frying) | | | Structure<br><br>Earthquake proof memory box- using lollystick and strong card/balsa wood? | | Mechanisms- wheel and axels<br><br>Waterwheel miniature garden feature |
| | Brief | To make an authentic Spanish omelette using seasonal ingredients, | | | To design and make a box that can survive an earthquake keeping precious items safe. | | To design and make a garden water feature using axles and wheels which turns when water is poured on to it. |
| | NC Objectives: | **Research**:<br>To be able to investigate and analyse a range of existing products.<br><br>To be able to identify what the product has been made from.<br><br>To be able to evaluate the product on its design and use.<br><br>**Design/Plan:**<br>To be able to use research and develop design criteria to inform the design of innovative, functional and appealing products that are fit for purpose and aimed at particular individuals or groups.<br><br>**Make:**<br>To be able to select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, peeling, grating) accurately. | | | **Research**:<br>To be able to investigate and analyse a range of existing products.<br><br>To be able to identify what the product has been made from.<br><br>To be able to evaluate the product on its design and use.<br><br>**Design/Plan:**<br>To be able to use research and develop design criteria to inform the design of innovative, functional and appealing products that are fit for purpose and aimed at particular individuals or groups.<br><br>**Make:**<br>To be able to select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, peeling, grating) accurately. | | **Research:**<br>To be able to investigate and analyse a range of existing products.<br><br>To be able to identify what the product has been made from.<br><br>To be able to evaluate the product on its design and use.<br><br>**Design/Plan:**<br>To be able to use research and develop design criteria to inform the design of innovative, functional and appealing products that are fit for purpose and aimed at particular individuals or groups.<br><br>**Make:**<br>To be able to select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, peeling, grating) accurately. |

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| | | **Evaluate**:<br>To be able to evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.<br><br>**Cooking and Nutrition:**<br>To be able to understand and apply the principles of a healthy and varied diet.<br><br>To be able to prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. | | | **Evaluate**:<br>To be able to evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.<br><br>**Technical Knowledge:**<br>To be able to apply their understanding of how to strengthen, stiffen and reinforce more complex structures. | | **Evaluate**:<br>To be able to evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.<br><br>To understand how **key events and individuals** in design and technology have helped shape the world. (can be linked to research lessons)<br><br>**Technical Knowledge:**<br>To be able to understand and use mechanical systems in their products (wheels, gears and axels) |
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| | **Cross-curricular coverage:** | | | | | | |
| **Year 4** | | **Jambo** | **Mummies, Pharaohs and Pyramids** | **Rotten Romans** | **Wild Water** | **Terrible Tudors** | **Faversham and Beyond – Beer and Beyond** |
| | **Unit** | Food and Nutrition- Prepare, cook and adapt<br><br>Cooking linked to Africa- "crunchies"- adapt a recipe<br><br>(Adapting a recipe/baking)<br><br>https://www.kapowprimary.com/subjects/design-technology/lower-key-stage-2/year-4/new- | | | Mechanism- Pulleys<br><br>Bridges over water- pulley system to move bridge up and down | | Electrical Systems<br><br>Torches or Doodlers (Kapow units)<br>https://www.kapowprimary.com/subjects/design-technology/upper-key-stage-2/year-5/electrical-systems-doodlers/ |

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| | | cooking-and-nutrition-adapting-a-recipe/ | | | | | |
| | | **Research**:<br>To be able to investigate and analyse a range of existing products.<br><br>To be able to identify what the product has been made from.<br><br>To be able to evaluate the product on its design and use.<br><br>**Design/Plan:**<br>To be able to use research and develop design criteria to inform the design of innovative, functional and appealing products that are fit for purpose and aimed at particular individuals or groups.<br><br>**Make:**<br>To be able to select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, peeling, grating) accurately.<br><br>**Evaluate**:<br>To be able to evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.<br><br>**Cooking and Nutrition:** | | | **Research:**<br>To be able to investigate and analyse a range of existing products.<br><br>To be able to identify what the product has been made from.<br><br>To be able to evaluate the product on its design and use.<br><br>**Design/Plan:**<br>To be able to use research and develop design criteria to inform the design of innovative, functional and appealing products that are fit for purpose and aimed at particular individuals or groups.<br><br>To be able to generate, develop, model and communicate their ideas through discussion, annotated sketches.<br><br>**Make:**<br>To be able to select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing) accurately.<br><br>**Evaluate:**<br>To be able to evaluate their ideas and products against their own design criteria and consider the | | **Research:**<br>To be able to investigate and analyse a range of existing products.<br><br>To be able to identify what the product has been made from.<br><br>To be able to evaluate the product on its design and use.<br><br>**Design/Plan:**<br>To be able to use research and develop design criteria to inform the design of innovative, functional and appealing products that are fit for purpose and aimed at particular individuals or groups.<br><br>To be able to generate, develop, model and communicate their ideas through discussion, annotated sketches.<br><br>**Make:**<br>To be able to select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing) accurately.<br><br>**Evaluate:**<br>To be able to evaluate their ideas and products against their own design criteria and consider the |

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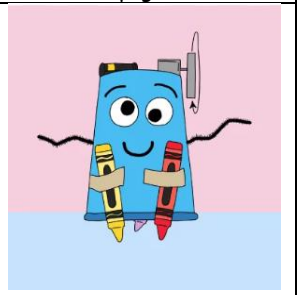
| | | To be able to understand and apply the principles of a healthy and varied diet.<br><br>To be able to prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. | | | views of others to improve their work.<br><br>To understand how **key events and individuals** in design and technology have helped shape the world. (can be linked to research lessons)<br><br>**Technical Knowledge:**<br>To be able to apply their understanding of how to strengthen, stiffen and reinforce more complex structures.<br><br>To be able to understand and use mechanical systems in their products (pulleys). | | views of others to improve their work.<br><br>**Technical Knowledge:**<br>To be able to understand and use electrical systems in their products (e.g. series circuits incorporating bulbs/motors) |
| | Brief | To adapt a traditional African recipe to suit the preferences of the customer. | | | To design and make a bridge that lifts to allow large boats underneath. | | To make a handheld torch that uses an on/off switch.<br><br>To make a doodler device that uses electronic components to doodle on a page. |
| | | https://sharingdeliciousness.com/south-african-crunchies/  | | |   | |  |

| UKS2 | | Term 1 | Term 2 | Term 3 | Term 4 | Term 5 | Term 6 |
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| Year 5 | | Let's Explore … the Americas | Maya and Beyond | Raid, Invade and Stayed | Rumble in the Jungle | World at War | Faversham and Beyond |
| | Unit | | Structures<br><br>Rocket Building | Mechanisms- Levers<br><br>Catapults and Trebuchets | | | Food and nutrition-<br><br>Prepare, cook, adapt for dietary needs or preferences. Awareness of seasonality, where and how produce is sourced and processed.<br><br>Bolognese<br><br>https://www.kapowprimary.com/subjects/design-technology/upper-key-stage-2/year-5/new-cooking-and-nutrition-developing-a-recipe/ |
| | NC Objectives: | | **Research:**<br>To be able to identify who made the product, when it was made and what its purpose is.<br><br>To be able to evaluate product on design, appearance and use,<br><br>**Design/Plan:**<br>To be able to generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.<br><br>**Make:**<br>To be able to select from and use a wider range of materials and components, including construction | **Research:**<br>To be able to identify who made the product, when it was made and what its purpose is.<br><br>To be able to identify what the product is made from and how environmentally friendly the materials are.<br><br>To be able to evaluate product on design, appearance and use,<br><br>**Design/Plan:**<br>To be able to generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams and prototypes.<br><br>**Make:** | | | **Research:**<br>To be able to identify who made the product, when it was made and what its purpose is.<br><br>To be able to identify what the product is made from and how environmentally friendly the materials are. (food miles/carbon footprint?)<br><br>To be able to evaluate product on design, appearance and use.<br><br>**Design/Plan:**<br>To be able to generate, develop, model and communicate their ideas through discussion and annotated sketches.<br><br>**Make:** |

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| | | | materials, according to their functional properties and aesthetic qualities.<br><br>**Evaluate**:<br>To be able to evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.<br><br>To understand how key events and individuals in design and technology have helped shape the world.<br><br>**Technical Knowledge:**<br>To be able to apply their understanding of how to strengthen, stiffen and reinforce more complex structures. | To be able to select from and use a wider range of materials and components, including construction materials, according to their functional properties and aesthetic qualities.<br><br>**Evaluate:**<br>To be able to investigate and analyse a range of existing products. (Can be used in research lesson)<br><br>To be able to evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.<br><br>To understand how key events and individuals in design and technology have helped shape the world.<br><br>**Technical Knowledge:**<br>To be able to apply their understanding of how to strengthen, stiffen and reinforce more complex structures.<br><br>To be able to understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages). | | | To be able to select from and use a wider range of ingredients, according to their functional properties and aesthetic qualities.<br><br>**Evaluate:**<br>To be able to investigate and analyse a range of existing products. (Can be used in research lesson)<br><br>To be able to evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.<br><br>**Cooking and Nutrition:**<br>To be able to understand and apply the principles of a healthy and varied diet.<br><br>To be able to prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.<br><br>To be able to understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed. (can be used for research lessons) |
| | **Brief** | | To make an aerodynamic rocket design that will fly in a simulated test, | To make a trebuchet using levers and weights to launch items across a distance, | | | To design a Bolognese recipe to suit varied dietary requirement and preferences. |

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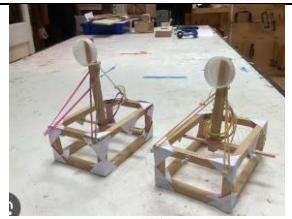
| | | |  |  <br>  | | |  |
| Year 6 | | Let's Explore … Asia | Invention and Industry | Bombs, Battles and Blitz | Eco Warriors | Who dunnit? | Faversham and Beyond |
| | Unit | | Mechanisms- Cams<br>Moving toys | Electrical systems<br>Steady Hand Game | | | Food and Nutrition<br><br>Come Dine with Me<br><br>https://www.kapowprimary.com/subjects/design-technology/upper-key-stage-2/year-6/new-cooking-and-nutrition-come-dine-with-me/ |
| | Brief | | - To make moving toys without electricity. | - To make a steady had game using electrical components | | | To produce a three course meal that could be sourced and sold locally. |
| | | | **Research:**<br>To be able to identify who made the product, when it was made and what its purpose is.<br><br>To be able to identify what the product is made from and how environmentally friendly the materials are<br><br>To be able to evaluate product on design, appearance and use.<br><br>**Design/Plan:**<br>To be able to generate, develop, model and communicate their ideas | **Research:**<br>To be able to identify who made the product, when it was made and what its purpose is.<br><br>To be able to identify what the product is made from and how environmentally friendly the materials are<br><br>To be able to evaluate product on design, appearance and use.<br><br>**Design/Plan:**<br>To be able to generate, develop, model and communicate their ideas | | | **Research:**<br>To be able to identify who made the product, when it was made and what its purpose is.<br><br>To be able to identify what the product is made from and how environmentally friendly the materials are. (food miles/carbon footprint?)<br><br>To be able to evaluate product on design, appearance and use.<br><br>To be able to identify the cost to make the product. |

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| | | | through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.<br><br>**Make:**<br>To be able to select from and use a wider range of materials and components, including construction materials, according to their functional properties and aesthetic qualities.<br><br>**Evaluate:**<br>To be able to evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.<br><br>To understand how key events and individuals in design and technology have helped shape the world.<br><br>**Technical Knowledge:**<br>To be able to understand and use mechanical systems in their products (for example, sliders, cogs and cams). | through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.<br><br>**Make:**<br>To be able to select from and use a wider range of materials and components, including construction materials, according to their functional properties and aesthetic qualities.<br><br>**Evaluate:**<br>To be able to evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.<br><br>**Technical Knowledge:**<br>To be able to understand and use electrical systems in their products (e.g. series circuits incorporating bulbs, buzzers and motors) | | | **Design/Plan:**<br>To be able to generate, develop, model and communicate their ideas through discussion and annotated sketches.<br><br>**Make:**<br>To be able to select from and use a wider range of ingredients, according to their functional properties and aesthetic qualities.<br><br>**Evaluate:**<br>To be able to investigate and analyse a range of existing products. (Can be used in research lesson)<br><br>To be able to evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.<br><br>**Cooking and Nutrition:**<br>To be able to understand and apply the principles of a healthy and varied diet.<br><br>To be able to prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.<br><br>To be able to understand seasonality and know where and how a variety of ingredients are grown, reared, caught and |

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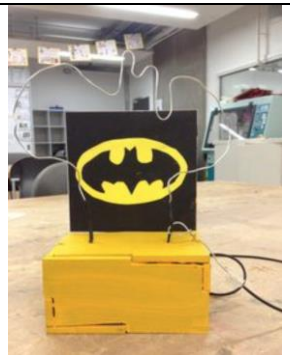
| | | |  |  | | | |