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| Kelloe DT | Autumn | Spring | Summer |
| Year 1 | **Christmas card with moving mechanism** -pop-up Christmas card-moving mechanism card-use IT to explore cards with moving mechanisms-card, paper-scissors, tearing, folding, curling-glue, pencil-foil, sugar paper, cellophane, tissue paper, card, wood-fabric, felt, wool, thread-look at current pop-up / moving mechanism cards**Evaluate their ideas and products against design criteria.**-structure of the card to hold the mechanism-mechanism in a Christmas card, slider or lever-create a simple picture to test mechanism | **Felt toy**-felt soft toy-jigsaw puzzle with a link to art-use IT to explore different felt toys-scissors, thread, staples, needle, glue-range of fabrics-simple soft toys-materials they are made from-how fixed together**Evaluate their ideas and products against design criteria.**-how to make fabric strong to withstand play-amount of fabric needed to make it secure | **Summer picnic / dish**Use the basic principles of a healthy and varied diet to prepare dishes. -learn how to prepare vegetables-create a veg / fruit skewer-look at how a healthy dish is prepared, using images of food / real uncooked items, create healthy dishes/plates-make a healthy dish**Understand where food comes from.**-identify different foods and the types of food they are-identify where the different foods come from / what type of weather do they need to grow |
| Year 2  | **Cooking and Nutrition – Winter Warmer**Use the basic principles of a healthy and varied diet to prepare dishes. -learn how to prepare vegetables-create a veg / fruit skewer-look at how a healthy dish is prepared, using images of food / real uncooked items, create healthy dishes/plates-make a healthy dish**Understand where food comes from.**-identify different foods and the types of food they are-identify where the different foods come from / what type of weather do they need to grow | **Replicate a ship*** design purposeful, functional, appealing products based on design criteria.
* generate, develop, model and communicate ideas
* build structures, exploring how they can be made stronger and stable
* select and use a range of tools equipment
* select from and use a range of materials and components
* explore and evaluate a range of existing products
* evaluate ideas and products against design criteria
 | **Create a vehicle*** design purposeful, functional, appealing products based on design criteria.
* generate, develop, model and communicate ideas
* explore and use mechanisms
* select and use a range of tools equipment
* select from and use a range of materials and components
* explore and evaluate a range of existing products
* evaluate ideas and products against design criteria
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| Year 3 | **Design:** Prove that a design meets a set criteria.**Make:**-Follow a step by step plan, choosing the right equipment and materials.-Work accurately to measure, make cuts and make holes.**Evaluate:**-Explain how to improve a finished model-know why or why not a model has been successful.**Technical knowledge:**-Know how to strengthen a product by stiffening a given part or reinforce a part of the structure | **Design:** -Design a product and make sure that it looks attractive-Choose a material for both its suitability and its appearance.**Make:**-Select the most appropriate tools and techniques for a given task.-Make a product which uses both electrical and mechanical components.**Evaluate:**-Explain how to improve a finished model-know why or why not a model has been successful.**Technical knowledge:**-Use a simple IT program within a design. | **Food technology:**-Describe how food ingredients come together-Weigh out ingredients and follow a given recipe to create a dish.-Talk about which food is healthy and which food is not. |
| Year 4 | **Design:** -Use ideas from other people when designing.- Persevere and adapt work when original ideas do not work. **Make:**-Know which tools to use for a particular task and show knowledge of handling the tool.**Evaluate:**-Evaluate and suggest improvements for design-Present a product in an interesting way.**Technical knowledge:**-Use IT, where appropriate, to add to the quality of the product. | **Design:** -Produce a plan and explain it.**-** Communicate ideas in a range of ways,including by sketches and drawings, which are annotated.**Make:**-Know which material is likely to give the best outcome.-Measure accurately.**Evaluate:**-Evaluate products for both their purpose and appearance.-Explain how the original design has been improved.**Technical knowledge:**-Links scientific knowledge by using lights, switches or buzzers. -Use electrical systems to enhance the quality of the product. | **Food technology:****-**Know how to be both hygienic and safe when using food.- Bring a creative element to the food product being designed. |
| Year 5 | * Making a prototype before making a final version
* Make a product that relies on pulleys or gears
* Use more complex IT program to help enhance the quality of the product produced
 | **Mexican*** Be hygienic and safe in the kitchen
* Know how to prepare a meal by collecting ingredients
* Know which season various foods are available for harvesting
 | * Come up with a range of ideas after collecting information from different sources
* Produce a detailed step by step plan
* Explain how a product will appeal to a specific audience
* Suggest alternative plans, outlining the positive features and draw backs
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| Year 6 | **Food technology*** Explain how food should be stored and give reasons
* Work within a budget to create a meal
* Understand the difference between a sweet and savoury meal
 | **Shelter** * Know how to test and evaluate products
* Use knowledge to improve a made product by strengthening, stiffening, or reinforcing
 | **Light*** Use market research to inform plans and ideas
* Justify planning
* Know which tool to use for a specific practical task
* Know how to use any tool correctly and safely
* Know what each tool is used for and explain why a specific tool is best
* Use electrical systems correctly and accurately to enhance a given product
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