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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 |
| 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 |
| 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 |