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| **What are the aims and intentions of this DT curriculum?**  Key Aims:   * develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world * build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users * critique, evaluate and test their ideas and products and the work of others * understand and apply the principles of nutrition and learn how to cook. | | | | | | |
| **Skills** | | | | | | |
| **Generating ideas - designing** | | | **Making** | **Evaluating** | **Key Vocabulary** | |
| Generate innovative ideas through research including surveys, interviews and questionnaires and discussion with peers to develop a design brief and criteria for a design specification.  Design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification.  Develop and communicate ideas through discussion, annotated drawings, exploded drawings and drawings from different views and, where appropriate, computer-aided design. | | | Produce detailed lists of equipment and fabrics relevant to their tasks  Write a step-by-step plan, including a list of resources required.  Select from and use, a range of appropriate utensils, tools and equipment accurately to measure and combine appropriate ingredients, materials and resources. | Investigate and analyse products linked to their final product.  Compare the final product to the original design specification and record the evaluations.  Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose.  Consider the views of others to improve their work. | design decisions, functionality, authentic, user, purpose, design specification, design brief, innovative, research, evaluate, design criteria, annotate, evaluate, mock-up, prototype | |
| **Term** | **Topic** | **Knowledge** | | | | **Assessment** |
| Autumn | Workshop | Understand how to strengthen, stiffen and reinforce 3-D frameworks.  Know and use technical vocabulary relevant to the project.  Understand that mechanical and electrical systems have an input, process and an output.  Understand how gears and pulleys can be used to speed up, slow down or change the direction of movement.  Know and use technical vocabulary relevant to the project. | | | |  |
| **Key Vocabulary**: frame structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent, pulley, drive belt, gear, rotation, spindle, driver, follower, ratio, transmit, axle, motor, circuit, switch, circuit diagram, annotated drawings, exploded diagrams, mechanical system, electrical system, input, process, output | | | |
| Spring | Food | Know how to use utensils and equipment including heat sources to prepare and cook food.  Understand about seasonality in relation to food products and the source of different food products.  Know and use relevant technical and sensory vocabulary. | | | |  |
| **Key Vocabulary:** ingredients, yeast, dough, bran, flour, wholemeal, unleavened, baking soda, spice, herbs fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble | | | |  |
| Summer | Textiles | Produce a 3-D textile product from a combination of accurately made pattern pieces, fabric shapes and different fabrics.  Understand how fabrics can be strengthened, stiffened and reinforced where appropriate.  Know and use technical vocabulary relevant to the project. | | | |  |
| **Key Vocabulary:** seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces, name of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings. | | | |