



## Bearpark Design & Technology Curriculum for Year 5 and 6 (Cycle A)

### 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
<p>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.</p> <p>Design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification.</p> <p>Develop and communicate ideas through discussion, annotated drawings, exploded drawings and drawings from different views and, where appropriate, computer-aided design.</p>	<p>Produce detailed lists of equipment and fabrics relevant to their tasks</p> <p>Write a step-by-step plan, including a list of resources required.</p> <p>Select from and use, a range of appropriate utensils, tools and equipment accurately to measure and combine appropriate ingredients, materials and resources.</p>	<p>Investigate and analyse products linked to their final product.</p> <p>Compare the final product to the original design specification and record the evaluations.</p> <p>Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose.</p> <p>Consider the views of others to improve their work.</p>	<p>design decisions, functionality, authentic, user, purpose, design specification, design brief, innovative, research, evaluate, design criteria, annotate, evaluate, mock-up, prototype</p>



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Term	Topic	Knowledge	Assessment
Autumn	Textiles  Combining different fabric shapes	<p>Produce a 3-D textile product from a combination of accurately made pattern pieces, fabric shapes and different fabrics.</p> <p>Understand how fabrics can be strengthened, stiffened and reinforced where appropriate.</p> <p>Measure, mark out, cut and shape materials and components accurately.</p> <p>Assemble, join and combine materials and components with accuracy. combine materials and components with accuracy.</p> <p>Apply a range of finishing techniques, and techniques that involve a number of steps.</p> <p>Know and use technical vocabulary relevant to the project.</p>	
		<p><b>Key Vocabulary:</b> 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.</p>	
Autumn	Food  Celebrating culture and seasonality	<p>To recognise that recipes can be adapted to change the appearance, taste, texture and aroma.</p> <p>To know that different food and drink contain different substances – nutrients, water and fibre – that are needed for health.</p> <p>Know how to use utensils and equipment including heat sources to prepare and cook food.</p> <p>Understand about seasonality in relation to food products and the source of different food products.</p> <p>Know and use relevant technical and sensory vocabulary.</p>	
		<p><b>Key Vocabulary:</b> 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</p>	
Autumn	Electrical systems  More complex switches and circuits	<p>Understand and use electrical systems in their products linked to science coverage.</p> <p>Apply their understanding of computing to program, monitor and control their products.</p> <p>Know and use technical vocabulary relevant to the project.</p>	
		<p><b>Key Vocabulary:</b> 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</p>	