

Crawley Ridge Junior School Skills Progression

Design and Technology

By the end of Key Stage 2 pupils, through a variety of creative and practical activities, will be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making.

As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open the door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordable and well, now and in later life.

Pupils should be taught to:

- Understand and apply the principles of a healthy and varied diet.
- Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.
- Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

	Year 2 – Prior learning	Year 3	Year 4	Year 5	Year 6
Themes	<ul style="list-style-type: none"> • 	<p>Structures – (Forest Schools) to make an Iron Age Roundhouse using natural materials in the school grounds</p> <p>Mechanisms: Pneumatic monsters</p> <p>Textiles – Design and make a cushion.</p> <p>Food: Eating seasonally</p>	<p>Structures: Safari buggies</p> <p>Electrical: Develop a new functional torch design.</p> <p>Textiles: Design and create a book sleeve</p> <p>Food: Adapting a recipe</p>	<p>Structures: Design and create a wooden bridge.</p> <p>Mechanisms: Pop up books using levers and sliders</p> <p>Textiles: Design and make a posy bag</p> <p>Food technology: Seasonality -Excellent small cake and pottage</p> <p>Forest Schools</p> <p>Weaving – wattle and daub</p>	<p>Structures: To design and construct an Air raid shelter</p> <p>Electrical: Design and develop a steady hand game.</p> <p>Food: Celebrating culture and seasonality.</p> <p>Forest schools: Wartime recipes</p> <p>Digital world: Navigating the world</p>
Design - Electrical (Understanding contexts, users and purposes, Generating, developing, modelling and communicating ideas)			<ul style="list-style-type: none"> • Designing a torch, giving consideration to the target audience and creating both design and success criteria focusing on features of individual design ideas 		<ul style="list-style-type: none"> • Designing a steady hand game - identifying and naming the components required • Drawing a design from three different perspectives • Generating ideas through sketching and discussion • Modelling ideas through prototypes • Understanding the purpose of products (toys), including what is meant by 'fit for purpose' and 'for

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Make – Electrical (Construction) (Planning, practical skills and techniques)			<ul style="list-style-type: none"> • Making a torch with a working electrical circuit and switch • Using appropriate equipment to cut and attach materials • Assembling a torch according to the design and success criteria 		<ul style="list-style-type: none"> • Constructing a stable base for a game • Accurately cutting, folding and assembling a net • Decorating the base of the game to a high quality finish • Making and testing a circuit Incorporating a circuit into a base
Evaluation - Electrical			<ul style="list-style-type: none"> • Evaluating electrical products • Testing and evaluating the success of a final product and taking inspiration from the work of peers 		<ul style="list-style-type: none"> • Testing own and others finished games, identifying what went well and making suggestions for improvement • Gathering images and information about existing children’s toys • Analysing a selection of existing children’s toys
Electrical - Technical Knowledge			<ul style="list-style-type: none"> • Learning how electrical items work • Identifying electrical products • Learning what electrical conductors and insulators are • Understanding that a battery contains stored electricity and can be used to power products • Identifying the features of a torch • Understanding how a torch works • Articulating the positives and negatives about different torches 		<ul style="list-style-type: none"> • Learning that batteries contain acid, which can be dangerous if they leak • Identifying and naming the circuit components in a steady hand game