

Design and Technology Curriculum Lower Key Stage 2. Year A-National Curriculum References:

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

Cooking and nutrition 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 a 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 affordably and well, now and in later life.

Term	Unit title	National Curriculum content				
Autumn	Mechanical Posters [Mechanical Systems]	Technical knowledge ♣ apply their understanding of how to strengthen, stiffen and reinforce more complex structures ♣ understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]				
		Design ♣ use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups ♣ generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design				
		Make ♣ select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately ♣ select from and use a wider range of materials and components, including construction materials, according to their functional properties and aesthetic qualities				
		Evaluate investigate and analyse a range of existing products evaluate their ideas and products against their own design criteria and consider the views of others to improve their work				
Spring	Juggling Balls [textiles]	Design ♣ use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups ♣ generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design				

Make ♣ select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], select from and use a wider range of materials and components, including textiles, according to their functional properties and aesthetic qualities **Evaluate** investigate and analyse a range of existing products A evaluate their ideas and products against their own design criteria and consider the views of others to improve their work Summer The Great Bread Bake Design ♣ use research and develop design criteria to inform the design of Off [Cooking and innovative, functional, appealing products that are fit for purpose, Nutrition] aimed at particular individuals or groups ♣ generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design Make * select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately select from and use a wider range of materials and components, including ingredients, according to their functional properties and aesthetic qualities **Evaluate** ♣ investigate and analyse a range of existing products A evaluate their ideas and products against their own design criteria and consider the views of others to improve their work understand how key events and individuals in design and technology have helped shape the world **Cooking and Nutrition** understand and apply the principles of a healthy and varied diet A 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.



<u>Design and Technology Curriculum Lower Key Stage 2. Year B-National Curriculum References:</u>

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

Cooking and nutrition 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 a 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 affordably and well, now and in later life.

Term	Unit title	National Curriculum content			
Autumn	Lets Go Fly a Kite				
	[structures]	Design			
		 use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design 			
		Make			
		select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately			
		select from and use a wider range of materials and components, including construction materials and textiles, according to their functional properties and aesthetic qualities			
		Evaluate			
		♣ investigate and analyse a range of existing products			
		evaluate their ideas and products against their own design criteria and consider the views of others to improve their work			
		understand how key events and individuals in design and technology have helped shape the world			
Spring	Battery Operated Lights	Technical knowledge			
	[electrical systems]	understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]			
		apply their understanding of computing to program, monitor and control their products.			
		Design			

- ♣ use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups ♣ generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design Make select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately ♣ select from and use a wider range of materials and components, including construction materials, according to their functional properties and aesthetic qualities **Evaluate** ♣ investigate and analyse a range of existing products A evaluate their ideas and products against their own design criteria and consider the views of others to improve their work understand how key events and individuals in design and technology have helped shape the world **Edible Garden Cooking and nutrition** Summer [cooking and understand and apply the principles of a healthy and varied diet A prepare and cook a variety of predominantly savoury dishes using a nutrition] range of cooking techniques ♣ understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. Design ♣ use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose,
 - aimed at particular individuals or groups
 - ♣ generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

Make

- ♣ select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- ♣ select from and use a wider range of materials and components, including ingredients, according to their functional properties and aesthetic qualities

Evaluate

- investigate and analyse a range of existing products
- A evaluate their ideas and products against their own design criteria and consider the views of others to improve their work