

Design and Technology Curriculum Upper 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	Super seasonal cooking [cooking and nutrition]	Cooking and nutrition 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. 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 evaluate their ideas and products against their own design criteria and consider the views of others to improve their work

Spring	Felt phone cases	Design
-1 0	[textiles]	♣ 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 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
		·
Summer	Automata animals	Technical knowledge
	[mechanical systems]	 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]
		example, gears, paneys, earns, levers and initiages
		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
		and consider the views of others to improve their work



<u>Design and Technology Curriculum Upper 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	Marbolous Structures [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	Global Food [cooking and nutrition]	Cooking and nutrition 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. 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

Summer	Programming adventures [understanding of computing to program, monitor and control]	 ♣ 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 ♣ evaluate their ideas and products against their own design criteria and consider the views of others to improve their work Technical knowledge ♣ 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
		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

understand how key events and individuals in design and

technology have helped shape the world