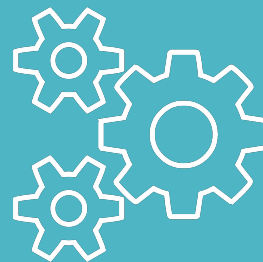


Design and technology

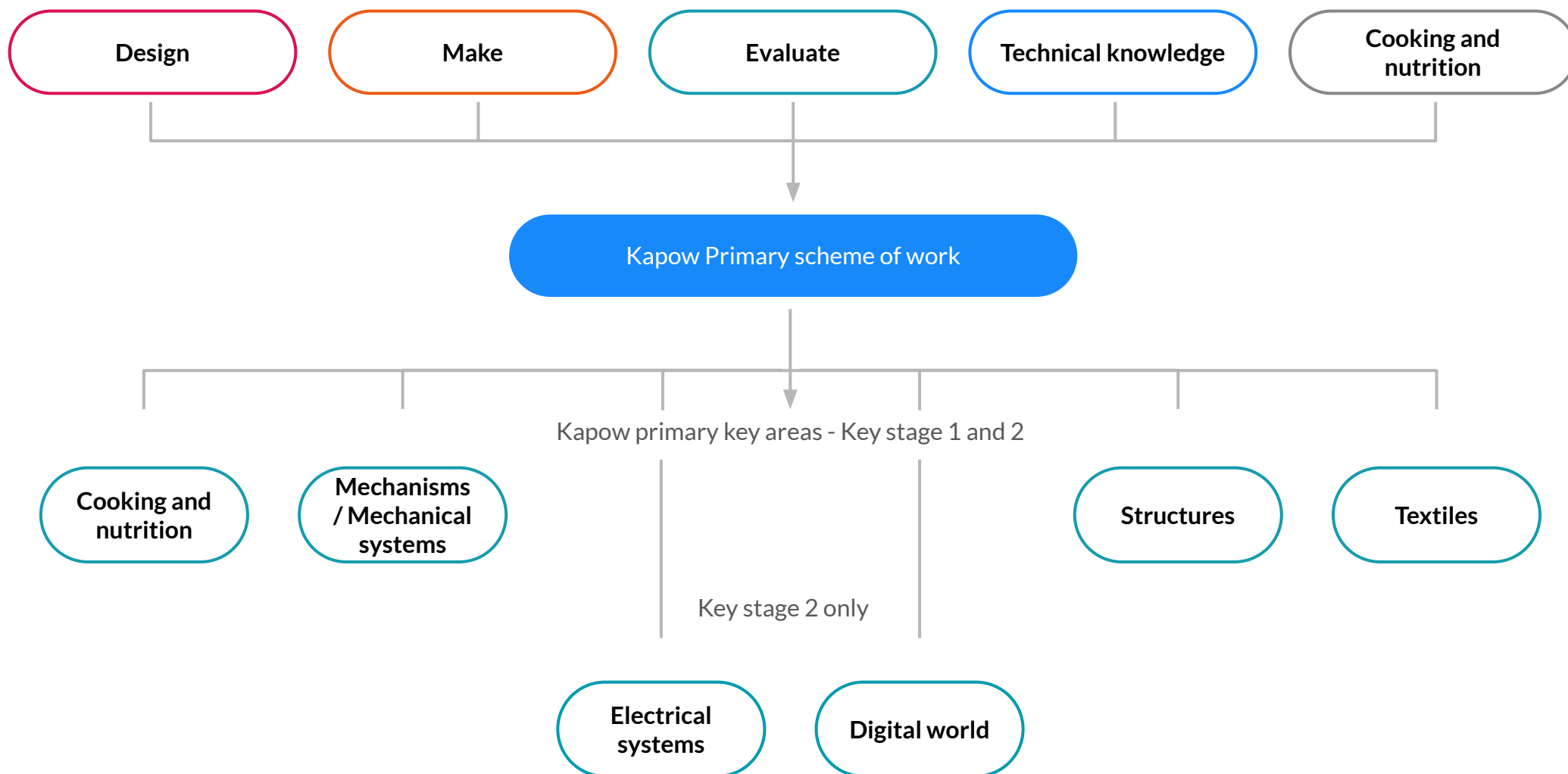


*Kapow
Primary™*

National curriculum
mapping

Introduction

Kapow Primary offers full coverage of the KS1 and KS2 Design and technology curriculum and we have categorised our content into six areas, with five strands that run throughout:



Overview

	Cooking and nutrition	Mechanisms	Structures	Textiles	Electrical systems	Digital world
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Aside from Electrical systems and Digital world, which are taught in KS2 only, each of these acts as the focus for a unit within each year group

Year 1	Fruit and vegetables Smoothie	Moving storybook Wheels and axles	Windmills	Puppets		
Year 2	A balanced diet	Moving monsters Ferris wheels	Baby bear's chair	Pouches		
Year 3	Eating seasonally	Pneumatic toys	Castles	Cushions	Electric poster	Electronic charm
Year 4	Adapting a recipe	Slingshot cars	Pavilions	Fastenings	Torches	Mindful moments timer
Year 5	What could be healthier?	Pop-up books	Bridges	Stuffed toys	Doodlers	Monitoring devices
Year 6	Come dine with me	Automata toys	Playgrounds	Waistcoats	Steady hand games	Navigating the world

The four strands (below) of the Design and technology curriculum run through each unit; with Cooking and nutrition as the focus of one unit per year

D

Design

M

Make

E

Evaluate

TK

Technical knowledge

C&N

Cooking and nutrition

National Curriculum by Kapow Primary's themes and topics

Key Stage 1 - National curriculum Design and technology content	Kapow Primary's Design and technology strands	Kapow Primary topics Key stage 1 - Year 1				
		* Moving story books	* Windmills	* Puppets	* Wheels and axles	* Fruit and vegetable smoothies
Design purposeful, functional, appealing products for themselves and other users based on design criteria	Design	✓	✓	✓	✓	
Generate, develop, model and communicate their ideas through talking, drawing, templates, mock- ups and, where appropriate, information and communication technology	Design	✓	✓	✓	✓	
Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]	Make	✓	✓	✓	✓	✓
Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics	Make	✓	✓	✓	✓	✓
Explore and evaluate a range of existing products	Evaluate	✓	✓		✓	✓
Evaluate their ideas and products against design criteria	Evaluate	✓	✓	✓	✓	

*Units that are included in the condensed curriculum

National Curriculum by Kapow Primary's themes and topics

Key Stage 1 - National curriculum Design and technology content	Kapow Primary's Design and technology strands	Kapow Primary topics Key stage 1 - Year 1				
		* Moving story books	* Windmills	* Puppets	* Wheels and axles	* Fruit and vegetable smoothies
Build structures, exploring how they can be made stronger, stiffer and more stable	Technical knowledge		✓			
Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.	Technical knowledge	✓	✓		✓	
Use basic principles of a healthy and varied diet to prepare dishes	Cooking and nutrition					✓
Understand where food comes from	Cooking and nutrition					✓

*Units that are included in the condensed curriculum

National Curriculum by Kapow Primary's themes and topics

Key Stage 1 - National curriculum Design and technology content	Kapow Primary's Design and technology strands	Kapow Primary topics Key stage 1 - Year 2				
		* Moving monsters	* Baby bear's chair	* Pouches	* Ferris wheels	* A balanced diet
Design purposeful, functional, appealing products for themselves and other users based on design criteria	Design	✓	✓	✓	✓	
Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology	Design	✓	✓	✓	✓	
Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]	Make	✓	✓	✓	✓	
Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics	Make	✓	✓	✓	✓	✓
Explore and evaluate a range of existing products	Evaluate	✓		✓	✓	✓
Evaluate their ideas and products against design criteria	Evaluate	✓	✓	✓	✓	

*Units that are included in the condensed curriculum

National Curriculum by Kapow Primary's themes and topics

Key Stage 1 - National curriculum Design and technology content	Kapow Primary's Design and technology strands	Kapow Primary topics Key stage 1 - Year 2				
		* Moving monsters	* Baby bear's chair	* Pouches	* Ferris wheels	* A balanced diet
Build structures, exploring how they can be made stronger, stiffer and more stable	Technical knowledge		✓		✓	
Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.	Technical knowledge	✓			✓	
Use basic principles of a healthy and varied diet to prepare dishes	Cooking and nutrition					✓
Understand where food comes from	Cooking and nutrition					✓

*Units that are included in the condensed curriculum

National Curriculum by Kapow Primary's themes and topics

Key Stage 2 - National curriculum Design and technology content	Kapow Primary's Design and technology strands	Kapow Primary topics Lower key stage 2 - Year 3					
		*Eating seasonally	*Castles	*Cushions	*Pneumatic toys	Electric poster	*Electronic charm
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	Design	✓	✓	✓	✓	✓	✓
Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer- aided design	Design		✓	✓	✓	✓	✓
Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately	Make		✓	✓	✓	✓	✓
Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics	Make	✓	✓	✓	✓	✓	✓
Investigate and analyse a range of existing products	Evaluate		✓	✓	✓		
Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work	Evaluate		✓	✓	✓	✓	✓

*Units that are included in the condensed curriculum

National Curriculum by Kapow Primary's themes and topics

Key Stage 2 - National curriculum Design and technology content	Kapow Primary's Design and technology strands	Kapow Primary topics Lower key stage 2 - Year 3					
		* Eating seasonally	* Castles	* Cushions	* Pneumatic toys	Electric poster	* Electronic charm
Understand how key events and individuals in design and technology have helped shape the world	Evaluate				✓		✓
Apply their understanding of how to strengthen, stiffen and reinforce more complex structures	Technical knowledge		✓				
Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]	Technical knowledge				✓		
Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]	Technical knowledge					✓	
Apply their understanding of computing to program, monitor and control their products	Technical knowledge						✓
Understand and apply principles of a healthy and varied diet	Cooking and nutrition	✓					
Prepare and cook variety of predominantly savoury dishes using a range of cooking techniques	Cooking and nutrition	✓					
Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed	Cooking and nutrition	✓					

*Units that are included in the condensed curriculum

National Curriculum by Kapow Primary's themes and topics

Key Stage 2 - National curriculum Design and technology content	Kapow Primary's Design and technology strands	Kapow Primary topics Lower key stage 2 - Year 4					
		* Pavilions	* Adapting a recipe	* Fastenings	* Slingshot cars	* Torches	Mindful timer
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	Design	✓	✓	✓	✓	✓	✓
Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design	Design	✓		✓	✓	✓	
Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately	Make	✓		✓	✓	✓	✓
Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics	Make	✓	✓	✓	✓	✓	
Investigate and analyse a range of existing products	Evaluate	✓	✓	✓	✓	✓	✓
Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work	Evaluate	✓	✓	✓	✓	✓	✓

*Units that are included in the condensed curriculum

National Curriculum by Kapow Primary's themes and topics

Key Stage 2 - National curriculum Design and technology content	Kapow Primary's Design and technology strands	Kapow Primary topics Lower key stage 2 - Year 4					
		* Pavilions	* Adapting a recipe	* Fastenings	* Slingshot cars	* Torches	Mindful timer
Understand how key events and individuals in design and technology have helped shape the world	Evaluate				✓	✓	
Apply their understanding of how to strengthen, stiffen and reinforce more complex structures	Technical knowledge	✓					
Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]	Technical knowledge				✓		
Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]	Technical knowledge					✓	
Apply their understanding of computing to program, monitor and control their products	Technical knowledge						✓
Understand and apply principles of a healthy and varied diet	Cooking and nutrition		✓				
Prepare and cook variety of predominantly savoury dishes using a range of cooking techniques	Cooking and nutrition		✓				
Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed	Cooking and nutrition		✓				

*Units that are included in the condensed curriculum

National Curriculum by Kapow Primary's themes and topics

Key Stage 2 - National curriculum Design and technology content	Kapow Primary's Design and technology strands	Kapow Primary topics Upper key stage 2 - Year 5					
		*What could be healthier?	*Pop-up books	Stuffed toys	*Doodlers	*Bridges	*Monitoring devices
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	Design	✓	✓	✓	✓	✓	✓
Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer- aided design	Design	✓	✓	✓		✓	✓
Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately	Make		✓	✓	✓	✓	
Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities	Make	✓	✓	✓		✓	
Investigate and analyse a range of existing products	Evaluate		✓	✓	✓	✓	
Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work	Evaluate		✓	✓	✓	✓	✓

*Units that are included in the condensed curriculum

National Curriculum by Kapow Primary's themes and topics

Key Stage 2 - National curriculum Design and technology content	Kapow Primary's Design and technology strands	Kapow Primary topics Upper key stage 2 - Year 5					
		* What could be healthier?	* Pop-up books	Stuffed toys	* Doodlers	* Bridges	* Monitoring devices
Understand how key events and individuals in design and technology have helped shape the world	Evaluate	✓					✓
Apply their understanding of how to strengthen, stiffen and reinforce more complex structures	Technical knowledge				✓	✓	✓
Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]	Technical knowledge		✓				
Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]	Technical knowledge				✓		
Apply their understanding of computing to program, monitor and control their products	Technical knowledge						✓
Understand and apply principles of a healthy and varied diet	Cooking and nutrition	✓					
Prepare and cook variety of predominantly savoury dishes using a range of cooking techniques	Cooking and nutrition	✓					
Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed	Cooking and nutrition	✓					

*Units that are included in the condensed curriculum

National Curriculum by Kapow Primary's themes and topics

Key Stage 2 - National curriculum Design and technology content	Kapow Primary's Design and technology strands	Kapow Primary topics Upper key stage 2 - Year 6					
		* Come dine with me	* Automata toys	* Steady hand game	* Playgrounds	* Navigating the world	Waistcoats
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	Design	✓	✓	✓	✓	✓	✓
Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer- aided design	Design		✓	✓	✓	✓	✓
Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately	Make		✓	✓	✓	✓	✓
Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities	Make	✓		✓	✓		✓
Investigate and analyse a range of existing products	Evaluate		✓	✓	✓		✓
Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work	Evaluate		✓	✓	✓	✓	✓

*Units that are included in the condensed curriculum

National Curriculum by Kapow Primary's themes and topics

Key Stage 2 - National curriculum Design and technology content	Kapow Primary's Design and technology strands	Kapow Primary topics Upper key stage 2 - Year 6					
		*Come dine with me	*Automata toys	*Steady hand game	*Playgrounds	*Navigating the world	Waistcoats
Understand how key events and individuals in design and technology have helped shape the world	Evaluate	✓	✓	✓			
Apply their understanding of how to strengthen, stiffen and reinforce more complex structures	Technical knowledge				✓		
Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]	Technical knowledge		✓				
Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]	Technical knowledge			✓			
Apply their understanding of computing to program, monitor and control their products	Technical knowledge					✓	
Understand and apply principles of a healthy and varied diet	Cooking and nutrition	✓					
Prepare and cook variety of predominantly savoury dishes using a range of cooking techniques	Cooking and nutrition	✓					
Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed	Cooking and nutrition	✓					

*Units that are included in the condensed curriculum