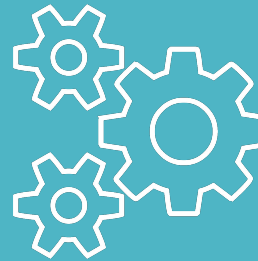


Design and technology

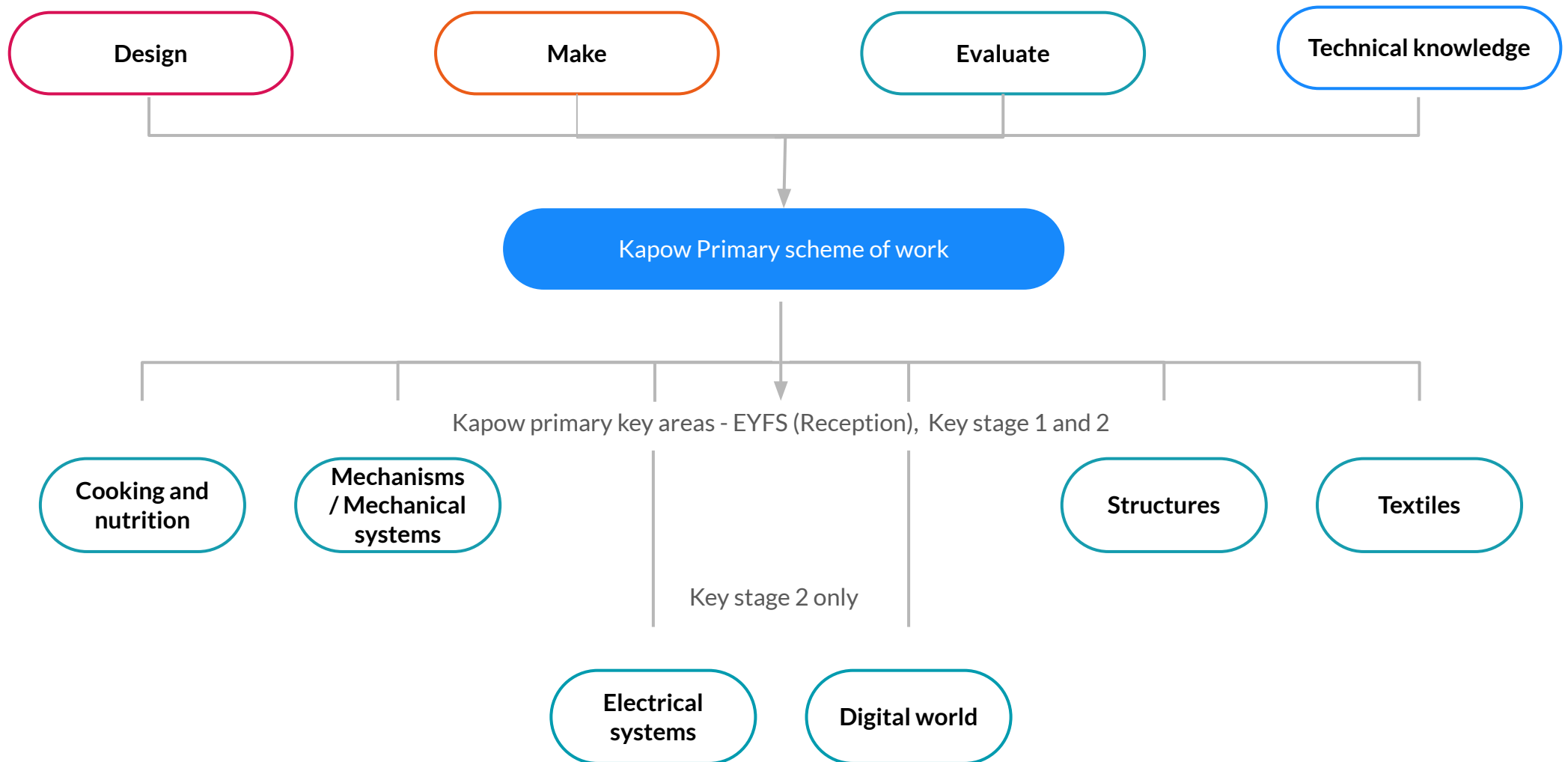


*Kapow
Primary™*

National curriculum
coverage

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 four 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

EYFS (Reception)	Soup		Boats Junk modelling	Bookmarks		
Year 1	Smoothies	Option 1: Matching slider game Option 2: Moving storybook Wheels and axles	Option 1: Stable structures Option 2: Constructing a windmill	Puppets		
Year 2	Balanced diet	Making a moving monster Fairground wheel	Option 1: A chair for a bear Option 2: Baby bear's chair	Pouches		
Year 3	Eating seasonally	Pneumatic toys	Castles	Cross stitch and appliqué	Electric poster	Wearable technology
Year 4	Adapting a recipe	Option 1: Mechanical cars Option 2: Making a slingshot car	Option 1: Helmets Option 2: Pavilions	Fastenings	Torches	Mindful moments timer
Year 5	Developing a recipe	Option 1: Gears and pulleys Option 2: Pop-up book	Bridges	Stuffed toys	Option 1: Wobble bots Option 2: Doodlers	Monitoring devices
Year 6	Come dine with me	Automata toys	Playgrounds	Option 1: Bags Option 2: Waistcoats	Steady hand game	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 Food unit per year

D Design

M Make

E Evaluate

TK Technical knowledge

Early years outcomes in Kapow Primary's units

Early Years Foundation Stage (Reception) Kapow Primary's units	Early years outcomes: Prime Areas Development Matters 2021 statements Early Learning Goals	Early years outcomes: Specific Areas Development Matters 2021 statements Early Learning Goals	Characteristics of effective learning
Structures: Junk modelling	Physical development -Develop small motor skills so that they can use a range of tools competently, safely and confidently. - ELG: Fine Motor Skills> Use a range of small tools, including scissors, paint brushes and cutlery.	Expressive Arts and Design -Explore, use and refine a variety of artistic effects to express ideas and feelings. -Return to and build on their previous learning, refining ideas and developing their ability to represent them. -Create collaboratively, sharing ideas, resources and skills. - ELG: Creating with materials> Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. - ELG: Creating with materials> Share their creations, explaining the process they have used.	✓ Playing and exploring ✓ Active learning ✓ Creating and thinking critically
Food: Soup	Communication and language -Learn new vocabulary. -Use new vocabulary throughout the day. - ELG: Speaking> Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary. Personal, social and emotional development -Know and talk about the different factors that support their overall health and wellbeing: healthy eating. - ELG: Managing self> Manage their own basic hygiene and personal needs, including... understanding the importance of healthy food choices. Physical development -Develop small motor skills so that they can use a range of tools competently, safely and confidently. - ELG: Use a range of small tools, including scissors, paint brushes and cutlery.	Understanding the world -Explore the natural world around them. - ELG: The Natural World>Explore the natural world around them, making observations and drawing pictures of animals and plants. Expressive Arts and Design -Explore, use and refine a variety of artistic effects to express ideas and feelings. - ELG: Creating with materials> Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.	✓ Playing and exploring ✓ Active learning

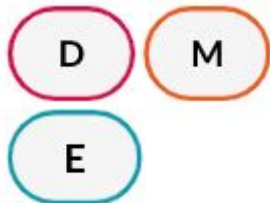
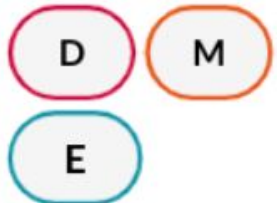
Early years outcomes in Kapow Primary's units

Early Years Foundation Stage (Reception) Kapow Primary's units	Early years outcomes: Prime Areas Development Matters 2021 statements Early Learning Goals	Early years outcomes: Specific Areas Development Matters 2021 statements Early Learning Goals	Characteristics of effective learning
Textiles: Bookmarks	Physical development -Develop small motor skills so that they can use a range of tools competently, safely and confidently. - ELG: Fine Motor Skills> Use a range of small tools, including scissors, paint brushes and cutlery.	Expressive Arts and Design -Explore, use and refine a variety of artistic effects to express ideas and feelings. -Return to and build on their previous learning, refining ideas and developing their ability to represent them. - ELG: Creating with materials> Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. - ELG: Creating with materials> Share their creations, explaining the process they have used.	✓ Playing and exploring ✓ Active learning ✓ Creating and thinking critically
Structures: Boats	Communication and language -Articulate their ideas and thoughts in well-formed sentences. -Connect one idea or action to another using a range of connectives. -Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen. - ELG: Speaking> Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary. - ELG: Speaking> Offer explanations for why things might happen.	Understanding the world -Explore the natural world around them. - ELG: The Natural World>Explore the natural world around them, making observations and drawing pictures of animals and plants. Expressive Arts and Design -Explore, use and refine a variety of artistic effects to express ideas and feelings. - ELG: Creating with materials> Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. - ELG: Creating with materials> Share their creations, explaining the process they have used.	✓ Playing and exploring ✓ Active learning ✓ Creating and thinking critically

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				
		*Option 1: Matching slider game *Option 2: Moving story books	*Option 1: Stable structures *Option 2: Constructing a windmill	* Puppets	*Option 1: *New* Wheels and axles *Option 2: Wheels and axles	* 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. *Units that are included in the condensed curriculum	Evaluate	✓	✓	✓	✓	✓

National Curriculum by Kapow Primary's themes and topics

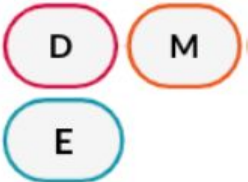
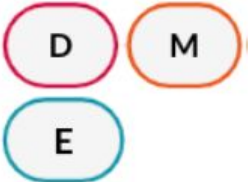
Key Stage 1 - National curriculum Design and technology content	Kapow Primary's Design and technology strands	Kapow Primary topics Key stage 1 - Year 1				
		*Option 1: Matching slider game *Option 2: Moving story books	*Option 1: Stable structures *Option 2: Constructing a windmill	* Puppets	*Option 1: *New* Wheels and axles *Option 2: Wheels and axles	* 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.						✓
Understand where food comes from.						✓

*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	* Option 1: A chair for a bear Option 2: Baby bear's chair	* Pouches	* Fairground wheel	* 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. *Units that are included in the condensed curriculum	Evaluate	✓	✓	✓	✓	✓

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	* Option 1: A chair for a bear Option 2: Baby bear's chair	* Pouches	* Fairground wheel	* 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.						✓
Understand where food comes from.						✓

*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	*Cross stitch and appliqué	*Option 1: *New* Pneumatic toys *Option 2: Pneumatic toys	Electric poster	*Wearable technology
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	*Cross stitch and appliqué	*Option 1: *New* Pneumatic toys *Option 2: Pneumatic toys	Electric poster	*Wearable technology
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.	D M E	✓					
Prepare and cook variety of predominantly savoury dishes using a range of cooking techniques.	D M E	✓					
Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.	D M E	✓		*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					
		*Option 1: Helmets *Option 2: Pavilions	* Adapting a recipe	* Fastenings	*Option 1: Mechanical cars *Option 2: Making a slingshot car	* Torches	Mindful moments 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	✓	✓	✓	✓	✓	✓

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					
		*Option 1: Helmets *Option 2: Pavilions	* Adapting a recipe	* Fastenings	*Option 1: Mechanical cars *Option 2: Making a slingshot car	* Torches	Mindful moments 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.	D M E						
Prepare and cook variety of predominantly savoury dishes using a range of cooking techniques.	D M E		✓				
Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.	D M E						
*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					
		* Developing a recipe	*Option 1: Gears and pulleys *Option 2: Pop-up books	Stuffed toys	*Option 1: Wobble bots *Option 2: 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

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National curriculum coverage

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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					
		* Developing a recipe	*Option 1: Gears and pulleys *Option 2: Pop-up books	Stuffed toys	*Option 1: Wobble bots *Option 2: 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.	D M E	✓					
Prepare and cook variety of predominantly savoury dishes using a range of cooking techniques.	D M E	✓					
Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.	D M E	✓					

*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	Option 1: Bags Option 2: 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	✓	✓	✓	✓	✓	✓

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	Option 1: Bags Option 2: 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.	D M E	✓					
Prepare and cook variety of predominantly savoury dishes using a range of cooking techniques.	D M E	✓					
Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.	D M E	✓					
*Units that are included in the condensed curriculum							

Cross-curricular links - Year 1

National curriculum subjects	Kapow Primary topics							
	*Option 1: Matching slider game	*Option 2: Making a moving story book	Option 1: Stable structures	*Option 2: Constructing a windmill	* Puppets	*Option 1: *New* Wheels and axles	*Option 2: Wheels and axles	* Smoothies
English		Reading - appreciating rhymes such as Humpty Dumpty			Reading - Listening to and answering questions about the main character's appearance in Little Red Riding Hood (or another story of your choice)			
Maths	Geometry - Pupils use directional language to describe the movement of products with mechanisms.			Geometry - Pupils use their knowledge of shapes to identify circles and find the centre to help them construct a windmill structure.		Geometry - properties of shapes - exploring the properties of shapes that make them appropriate for a wheel. Cutting out different shapes.	Identifying lengths on their design, considering how wheels work	
Science	Everyday materials - Pupils consider the best material to make their product based on its properties. Working scientifically - Performing simple tests and using observations to decide the advantages and disadvantages of a particular method.		Everyday materials - Pupils use packaging made of different materials and cardboard to make a structure. Working scientifically - Performing simple tests and using observations related to stability.			Everyday materials - exploring the properties of materials they could use to make a pull-along toy.		Working scientifically - classifying fruit and vegetables Animals, including humans - learning about the importance of fruit and vegetables in the diet and food hygiene

Cross-curricular links - Year 1 continued.

National curriculum subjects	Kapow Primary topics							
	*Option 1: Matching slider game	*Option 2: Making a moving story book	Option 1: Stable structures	*Option 2: Constructing a windmill	* Puppets	*Option 1: *New* Wheels and axles	*Option 2: Wheels and axles	* Smoothies
Art and design	Pupils draw pictures to match the words on their game.	Drawing the background of their design along with the moving parts	Sketching the design and adding decoration to the product.					
Computing							Digitally painting a flag for their car (extension activity)	
Geography				Learning about how windmills are used today to generate electricity (wind turbines)				
Physical education			Developing balance and coordination by trying out different balance poses.					

Cross-curricular links - Year 2

National curriculum subjects	Kapow Primary topics					
	* Fairground wheel	* Balanced diet	* Making a moving monster	*Option 1: A chair for a bear	*Option 2: Baby bear's chair	* Pouches
English		Reading - reading a letter and summarising the key points		Reading - discussing the events from 'There's a Bear on My Chair' by Ross Collins	Reading - discussing the events from 'Goldilocks and the three bears'	
Maths	Talking about 3d shapes and naming them correctly		Recording a tally survey	Creating and naming some 3D shapes including naming the 2D shapes on the ends of prisms.	Creating 3D shapes from playdough, Recording totals on a tally chart	
Science	Discussing the properties of materials when choosing materials for their fairground wheel	Discussing the senses that humans have, having an awareness of food hygiene		Working scientifically - observing closely, using simple equipment, performing simple tests Everyday materials - describe the simple physical properties of a variety of everyday materials	Interpreting the results of the tip-test	
Art and design			Sketching design ideas			Decorating the pouch using a range of materials
Computing	Practising drag and drop skills by creating an inspiration board (extension activity)					
Geography					Identifying natural and man-made structures	

Cross-curricular links - Year 3

National curriculum subjects	Kapow Primary topics						
	*Cross-stitch and appliqué Cushions or Egyptian collars	Electric poster	*Option 1: *New* Pneumatic toys	*Option 2: Pneumatic toys	* Wearable technology	* Eating seasonally	* Castles
English					Reading - considering language on sales displays and how it persuades us to buy the product	Reading - following the instructions in a recipe	
Maths	Choosing a 2D shape for their cushion, using knowledge of length to leave correct space for stuffing, seam and running stitch length		Drawing and manipulating 2D shapes, working with nets of 3D shapes (extension activity).		Drawing and manipulating 2D shapes, working with nets of 3D shapes (extension activity)		Identifying and naming 2D and 3D shapes in castle structures, drawing 2D shapes, constructing nets to make 3D shapes
Science		Electricity (Y4) - building a simple circuit and identifying components of a circuit	Forces and magnets - considering how pushes and pulls cause air movement in a pneumatic mechanism.				

Cross-curricular links - Year 3 continued...

National curriculum subjects	Kapow Primary topics						
	*Cross-stitch and appliqué Cushions or Egyptian collars	Electric poster	*Option 1: *New* Pneumatic toys	*Option 2: Pneumatic toys	* Wearable technology	* Eating seasonally	* Castles
Art and design	Designing a theme for their applique shapes (maybe around another topic)		Learning about designers in history; exploring different diagram types and understanding their uses; using drawings to communicate ideas; constructing an aesthetic toy and decorating with embellishments.	Decorating their pneumatic toys with embellishments			
Computing					Learning about the history of Computers and how they have developed over time into smart wearables today, writing a programme to enable an LED to flash on a button press, using CAD software to design		Using powerpoint to create their own net (extension activity)
Geography				Discussing how electricity can be made using wind and sea power		Knowing what climate is and that it affects food growth, reading information from a map of the world, knowing the environmental impact of importing food	
History	Learning about Egyptian collars (If you choose the Egyptian collars theme for this unit)	Creating posters that give information about Ancient Rome			Learning about the Digital revolution and the history of computers		Learning about the features of castles and their purpose
RSE/PSHE						Considering food hygiene, knowing that fruit and vegetables give us nutritional benefits	

Cross-curricular links - Year 4

National curriculum subjects	Kapow Primary topics						
	*Torches	*Option 1: Mechanical cars *Option 2: Making a slingshot car	Mindful moments timer	*Adapting a recipe	*Option 1: Helmets	*Option 2: Pavilions	*Fastenings
English				Spoken language - giving a brief pitch for their biscuit recipe	Spoken language Listen and respond appropriately to adults and their peers. Ask relevant questions to extend their understanding and knowledge. Articulate and justify answers, arguments and opinions. Maintain attention and participate actively in collaborative conversations, staying on topic and initiating and responding to comments. Listen and respond appropriately to adults and their peers.		
Maths		Using nets to create 3D shapes, measuring accurately	Creating a 3D structure using a net	Completing a budget, considering profit margins, using nets to create 3D packages		Building 3D shapes to test the strength of different structures	
Science	Electricity - Identifying electrical products, conductors and insulators, building a simple series circuit with a switch	Forces - understanding the concept of air resistance (Y5) when designing their car			Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment.		

Cross-curricular links - Year 4 continued...

National curriculum subjects	Kapow Primary topics						
	*Torches	*Option 1: Mechanical cars *Option 2: Making a slingshot car	Mindful moments timer	*Adapting a recipe	*Option 1: Helmets	*Option 2: Pavilions	*Fastenings
Art and design		Decorating the panels of the chassis	Decorating their mindful moments timer case		To improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay].	Creating textural effects with materials to clad their structure	
Computing			Programming a micro:bit to function as a timer, debugging code, using software to create logos				Taking photographs of fastenings they find
Geography		Considering eco-friendly ways of powering cars					
History	Learning about life before electricity	Considering life before the motor car					
RSE/PSHE	Identifying electrical hazards		Sharing ways to be mindful and how this helps us to look after our mental health	Following basic food hygiene	That each person's body belongs to them, and the differences between appropriate and inappropriate or unsafe physical, and other, contact.		

Cross-curricular links - Year 5

National curriculum subjects	Kapow Primary topics							
	*Option 1: Gears and pulleys	*Option 2: Pop-up books	*Option 1: Wobble bots	*Option 2: Doodlers	* Monitoring devices	* Developing a recipe	* Bridges	Stuffed toys
English		Adding captions to their pop-up books to suit the audience		Writing - writing instructions on how to make a Doodler				
Maths							Measuring wood accurately to the nearest mm, draw 45° angles	
Science	Forces - exploring mechanisms, including, pulleys and gears		Electricity -Exploring electrical circuit, identifying and naming components, working investigatively and drawing conclusions	Electricity -Exploring electrical circuit, identifying and naming components, working investigatively and drawing conclusions	Animals, including humans - finding out about the needs of animals		Using investigative methods to test the strength of a range of bridges, considering properties of materials	

Cross-curricular links - Year 5

National curriculum subjects	Kapow Primary topics							
	*Option 1: Gears and pulleys	*Option 2: Pop-up books	*Option 1: Wobble bots	*Option 2: Doodlers	* Monitoring devices	* Developing a recipe	* Bridges	Stuffed toys
Art and design		Drawing components for their pop-up books	Designing a wobble bot in an appealing way for the user.			Designing a label for their bolognaise		
Computing					Using search engines to research animals, programming and debugging an animal monitor, using CAD skills to create virtual models	Using search engines to research variations of a recipe		
Geography	Human and physical geography - exploring sustainability and the use of the renewable energy resource, wind.				Considering how we can use the six Rs of sustainability to develop more sustainable habits			
History					Learning about how thermometers have developed, learning about the history behind plastic use			
RSE/PSHE					Considering our shared responsibilities for protecting the environment			

Cross-curricular links - Year 6

National curriculum subjects	Kapow Primary topics						
	*Navigating the world	*Come dine with me	*Playgrounds	Option 1: Bags	Option 2: Waistcoats	*Steady hand game	*Automata toys
English	Reading - finding key points in a clients letter to create design criteria Spoken language - presenting a pitch about their product			Spoken language - develop understanding through exploring different ideas.			
Maths			Measuring accurately to the nearest mm	Geometry: Properties of shapes: Draw 2-D shapes using given dimensions and angles. Recognise, describe and build simple 3-D shapes, including making nets. Ratio and proportion Solve problems involving similar shapes where the scale factor is known or can be found.		Using net templates to create the base of their game	Measuring accurately to the nearest mm
Science	Considering materials and their functional properties	Recognising the impact of diet on our bodies				Drawing circuit diagrams, naming components and their functions	

Cross-curricular links - Year 6

National curriculum subjects	Kapow Primary topics						
	*Navigating the world	*Come dine with me	*Playgrounds	Option 1: Bags	Option 2: Waistcoats	*Steady hand game	*Automata toys
Art and design			Creating textural effects with materials to clad their structure			Exploring one line drawings	
Computing	Programming a compass (all), pedometer and a light/thermometer (extension), using CAD skills to produce a virtual model					Recapping rules for safe online searching	
Geography	Considering sustainability in design						
History							Learning about Victorian toys
RSE/PSHE		Considering different dishes from other cultures, developing awareness of healthy eating, following basic food hygiene					

Version history

This page shows recent updates to the document.

Date	Update
28.08.23	Year 3 unit 'Wearable technology' replaces Electronic charm.
28.10.23	Updated to reflect refreshed Cooking and nutrition units.
30.04.24	Updated to reflect refreshed 'Constructing a windmill unit.'
21.08.24	Updated to reflect refreshed units published on the website.
02.09.24	Updated links to reflect new unit published.
18.10.24	Updated links to reflect new unit published.
18.12.24	Updated links to reflect newly published units.
19.02.25	Added missing tick on p. 7.
22.05.25	Updated to reflect newly published unit.
27.06.25	Updated to reflect newly published unit.
18.07.25	Updated to reflect newly published unit.
28.08.25	Updated to reflect newly published units.
22.10.25	Updated to reflect newly published units.