

# Design and technology, and Art and design

## Long term plan

Combined

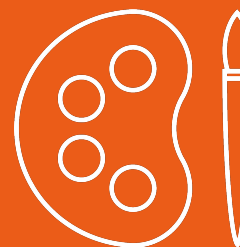
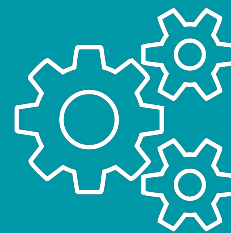
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A combined long-term plan for Kapow Primary's **Art and design**, and **Design and technology** subjects for schools who alternate between the subjects each half term.

**NB.** Please refer to our standard Long-term plans for each subject for further information.

N.B. This document is regularly updated to reflect changes to our content. This version was created on 06.07.2022  
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**Kapow**  
Primary™

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As our DT units are shorter, we have added some suggestions for stand-alone lessons or you may decide to use the time to complete the full Art and design units, rather than omitting lessons.

	Autumn term		Spring term		Summer term		Stand alone lessons
	Design and technology	Art and design	Design and technology	Art and design	Design and technology	Art and design	Design and technology
Year 1	<a href="#">Structures: Constructing windmills</a> (4 lessons)	<a href="#">Drawing: Make your mark</a> (omit lesson 3) (4 lessons)  <a href="#">Painting: Colour splash</a> (omit lesson 4) (4 lessons)	<a href="#">Textiles: Puppets</a> (4 lessons)	<a href="#">Sculpture and 3D: Paper play</a> (5 lessons)	<a href="#">Food: Fruit and vegetables</a> (4 lessons)	<a href="#">Craft and design: Embellishments</a> (5 lessons)	> <a href="#">Exploring sliders and movement</a>
Year 2	<a href="#">Art and design</a>	<a href="#">Design and technology</a>	<a href="#">Art and design</a>	<a href="#">Design and technology</a>	<a href="#">Art and design</a>	<a href="#">Design and technology</a>	<a href="#">Design and technology</a>
	<a href="#">Drawing: Tell a story</a> (omit lesson 5) (4 lessons)  <a href="#">Craft and design: Map it out</a> (omit lesson 4) (4 lessons)	<a href="#">Structures: Baby bear's chair</a> (4 lessons)	<a href="#">Painting and mixed media: Beside the seaside</a> (5 lessons)	<a href="#">Mechanisms: Fairground wheel</a> (4 lessons)	<a href="#">Sculpture and 3D: Clay houses</a> (5 lessons)	<a href="#">Mechanisms: Making a moving monster</a> (4 lessons)	> <a href="#">Hidden sugars in drinks</a>
Year 3	<a href="#">Design and technology</a>	<a href="#">Art and design</a>	<a href="#">Design and technology</a>	<a href="#">Art and design</a>	<a href="#">Design and technology</a>	<a href="#">Art and design</a>	<a href="#">Design and technology</a>
	<a href="#">Food: Eating seasonally</a> (4 lessons)	<a href="#">Drawing: Growing artists</a> (omit lesson 3) (4 lessons)  <a href="#">Painting and mixed media: Prehistoric painting</a> (omit lesson 5) (4 lessons)	<a href="#">Digital world: Electronic charm</a> (4 lessons)	<a href="#">Sculpture and 3D: Abstract shape and space</a> (5 Lessons)	<a href="#">Structures: Constructing a castle</a> (4 lessons)	<a href="#">Craft and design: Ancient Egyptian scrolls</a> (5 lessons)	> <a href="#">Cross-stitch and appliqué</a> > <a href="#">Exploring pneumatics</a> > <a href="#">Designing a pneumatic toy</a>

As our DT units are shorter, we have added some suggestions for stand-alone lessons or you may decide to use the time to complete the full Art and design units, rather than omitting lessons.

	Autumn term		Spring term		Summer term		Stand alone lessons
	Art and design	Design and technology	Art and design	Design and technology	Art and design	Design and technology	Design and technology
Year 4	<p><b>Sculpture and 3D: Mega materials</b> (omit lesson 4) (4 lessons)</p> <p><b>Drawing: Power prints</b> (omit lesson 1) (4 lessons)</p>	<p><u>Structure: Pavilions</u> (4 lessons)</p>	<p><u>Painting and mixed media: Light and dark</u> (5 lessons)</p>	<p><u>Mechanical systems: Making a slingshot car</u> (4 lessons)</p>	<p><b>Craft and design: Fabric of nature</b> (5 lessons)</p>	<p><u>Electrical systems: Torches</u> (4 lessons)</p>	<p>&gt; <u>Following a recipe</u></p> <p>&gt; <u>Evaluating fastenings</u></p>
Year 5	<p><u>Electrical systems: Doodlers</u> (4 lessons)</p>	<p><b>Sculpture and 3D: Interactive installation</b> (omit lesson 5) (4 lessons)</p> <p><b>Craft and design: Architecture</b> (omit lesson 1) (4 lessons)</p>	<p><u>Mechanical systems: Making a pop-up book</u> (4 lessons)</p>	<p><b>Drawing: I need space</b> (5 lessons)</p>	<p><u>Food: What could be healthier?</u> (4 lessons)</p>	<p><u>Painting and mixed media: Portraits</u> (5 lessons)</p>	
Year 6	<p><b>Craft and design: Photo opportunity</b> (omit lesson 4) (4 lessons)</p> <p><b>Painting and mixed media: Artist study</b> (omit lesson 5) (4 lessons)</p>	<p><u>Textiles: Waistcoats</u> (4 lessons)</p>	<p><b>Drawing: Make my voice heard</b> (5 lessons)</p>	<p><u>Structure: Playgrounds</u> (4 lessons)</p>	<p><b>Sculpture and 3D: Making memories</b> (5 lessons)</p>	<p><u>Digital world: Navigating the world</u> (4 lessons)</p>	

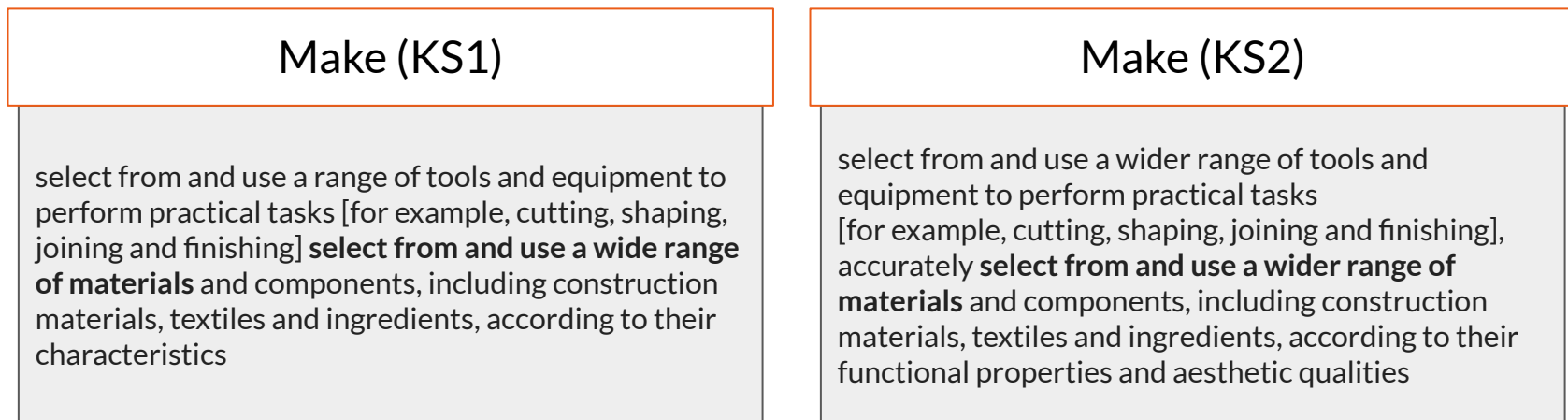
# Why have we chosen to include these units?

For **Art and design**, we have been able to include lessons from all our units, omitting those which we feel are not absolutely necessary to meet the key skills and knowledge aims of the unit.

For **Design and technology**, we had to make more difficult decisions about which units to include and which to omit. We have carefully selected units to ensure gradual progression towards the National curriculum end of key stage attainment targets and to cover all of the five strands shown below in enough detail.



Some key areas appear less frequently than others, for example Textiles, and this is deliberate. The National curriculum statements below show that working with textiles is only a small element of the Make strand and many of the making techniques covered in our Textiles units are also covered with a range of materials in other units, such as the use of templates, modelling, measuring and marking out, cutting, shaping and joining.



Similarly in Year 2, the coverage of key areas is deliberately imbalanced as there are two Mechanisms units. This is because there is strong progression between the Y1 Structures: Constructing a windmill and the Y2 Mechanisms: Fairground wheel and then again with the Y2 Mechanisms: Making a moving monster. To omit one of these units would negatively impact on the progression.

	Year 1	Year 2
Autumn term	<p><b>Structures: Constructing windmills</b> Designing, decorating and building a windmill for their mouse client to live in, developing an understanding of different types of windmill, how they work and their key features.</p>	<p><b>Drawing: Tell a story (omit lesson 5)</b> Using storybook illustration as a stimulus, children develop their mark making skills to explore a wider range of tools and experiment with creating patterned surfaces to add texture and detail to drawings.</p> <p><b>Craft and design: Map it out (omit lesson 4)</b> Responding to a design brief, children create a piece of art that represents their local area using a map as their stimulus. They learn three techniques for working creatively with materials.</p>
	<p><b>Drawing: Make your mark (omit lesson 3)</b> Developing observational drawing skills when exploring mark-making. Children use a range of tools, investigating how texture can be created in drawings.</p> <p><b>Painting and mixed media: Colour splash (omit lesson 4)</b> Exploring colour mixing through paint play, children use a range of tools and work on different surfaces.</p>	<p><b>Structures: Baby bear's chair</b> Using the tale of Goldilocks and the Three Bears as inspiration, children help Baby Bear by making him a brand new chair. When designing the chair, they consider his needs and what he likes and explore ways of building it so that it is strong.</p>
Spring term	<p><b>Textiles: Puppets</b> Exploring different ways of joining fabrics before creating their own hand puppets based upon characters from a well-known fairytale. Children work to develop their technical skills of cutting, glueing, stapling and pinning.</p>	<p><b>Painting and mixed media: Beside the seaside - coming soon!</b> Taking seaside paintings and impressionist painters as a starting point, pupils investigate how mixing a wider range of colours contributes to different effects. They explore surface texture when selecting and combining materials to make their final piece.</p>
	<p><b>Sculpture and 3D: Paper play</b> Creating simple three dimensional shapes and structures using familiar materials, children develop skills in manipulating paper and card. They fold, roll and scrunch materials to make their own sculpture.</p>	<p><b>Mechanisms: Fairground wheel</b> Designing and creating their own Ferris wheels, considering how the different components fit together so that the wheels rotate and the structures stand freely. Pupils select appropriate materials and develop their cutting and joining skills</p>
Summer term	<p><b>Food: Fruit and vegetables</b> Handling and exploring fruits and vegetables and learning how to identify which category they fall into, before undertaking taste testing to establish their chosen ingredients for the smoothie they will make a design packaging for.</p>	<p><b>Sculpture and 3D: Clay houses</b> Developing their ability to work with clay, children learn how to create simple thumb pots then explore the work of sculptor Rachel Whiteread and apply her ideas in a final piece that uses techniques such as cutting, shaping, joining and impressing into clay.</p>
	<p><b>Craft and design: Embellishments- coming soon!</b> Developing skills in measuring, cutting and adding decoration to create a range of decorative items such as jewellery and headpieces inspired by different cultures.</p>	<p><b>Mechanisms: Making a moving monster</b> After learning the terms; pivot, lever and linkage, children design a monster which will move using a linkage mechanism. Children practise making linkages of different types and varying the materials they use to bring their monsters to life.</p>

	Year 3	Year 4
Autumn term	<p><b>Food: Eating seasonally</b> Discovering when and where fruits and vegetables are grown. Learning about seasonality in the UK and the relationship between the colour of fruits and vegetables and their health benefits by making three dishes.</p>	<p><b>Sculpture and 3D: Mega materials (omit lesson 4) - coming soon!</b> Learning about the work of inspirational sculptors, children create personal responses and make choices about techniques and materials such as recycled materials and clay.</p> <p><b>Drawing: Power prints (omit lesson 1) - coming soon!</b> Using everyday electrical items as a starting point, pupils develop an awareness of composition in drawing and combine media for effect when developing a drawing into a print.</p>
	<p><b>Drawing: Growing artists (omit lesson 3)</b> Using botanical drawings and scientific plant studies as inspiration, pupils explore the techniques of artists such as Georgia O’Keefe and Maud Purdy to draw natural forms, becoming aware of differences in the choice of drawing medium, scale and the way tonal shading can help create form.</p> <p><b>Painting and mixed media: Prehistoric painting (omit lesson 5)</b> Investigating making their own paints, making tools and painting on different surfaces, the children explore prehistoric art.</p>	<p><b>Structure: Pavilions</b> Exploring pavilion structures, children learn about what they are used for and investigate how to create strong and stable structures before designing and creating their own pavilions, complete with cladding.</p>
Spring term	<p><b>Digital world: Electronic charm</b> Designing, coding, making and promoting a Micro:bit electronic charm to use in low-light conditions. Children develop their understanding of programming to monitor and control their products.</p>	<p><b>Painting and mixed media: Light and dark</b> Developing colour mixing skills, using shades and tints to show form and create three dimensions when painting. Pupils learn about composition and plan their own still life to paint, applying chosen techniques.</p>
	<p><b>Sculpture and 3D: Abstract shape and space - coming soon!</b> Exploring how shapes and negative spaces can be represented by three dimensional forms. Manipulating a range of materials, children learn ways to join and create free standing structures inspired by the work of Anthony Caro and Ruth Asawa.</p>	<p><b>Mechanical systems: Making a slingshot car</b> Transforming lollipop sticks, wheels, dowels and straws into a moving car. Using a glue gun to, making a launch mechanism, designing and making the body of the vehicle using nets and assembling these to the chassis.</p>
Summer term	<p><b>Structures: Constructing a castle</b> Learning about the features of a castle, children design and make one of their own. Using configurations of handmade nets and recycled materials to make towers and turrets and constructing a base to secure them.</p>	<p><b>Craft and design: Fabric of nature - coming soon!</b> Developing skills in textile techniques, pupils explore the beauty of the natural world to create stunning visual art inspired by the striking colours, pattern and textures of bird and insect life.</p>
	<p><b>Craft and design: Ancient Egyptian scrolls</b> Learning about the way colour, scale and pattern influenced ancient Egyptian art, children explore the technique of papermaking to create a papyrus-style scroll.</p>	<p><b>Electrical systems: Torches</b> Applying their scientific understanding of electrical circuits, children create a torch, designing and evaluating their product against set design criteria.</p>

	Year 5	Year 6
Autumn term	<p><b>Electrical systems: Doodlers</b> Explore series circuits further and introduce motors. Explore how the design cycle can be approached at a different starting point, by investigating an existing product, which uses a motor, to encourage pupils to problem-solve and work out how the product has been constructed, ready to develop their own.</p>	<p><b>Craft and design: Photo opportunity (omit lesson 4)</b> Exploring photography as a medium for expressing ideas, pupils investigate scale and composition, colour and techniques for adapting finished images.</p> <p><b>Painting and mixed media: Artist study (omit lesson 5) - coming soon!</b> Identifying an artist that interests them, children research the life, techniques and artistic intentions of that individual.</p>
	<p><b>Sculpture and 3D: Interactive installation (omit lesson 5) - coming soon!</b> Using inspiration of historical monuments and modern installations, children plan by researching and drawing, a sculpture to fit a design brief.</p> <p><b>Architecture (omit lesson 1) - coming soon!</b> Investigating the built environment, drawing from observation and evaluating design features of buildings.</p>	<p><b>Textiles: Waistcoats</b> Selecting suitable fabrics, using templates, pinning, decorating and stitching to create a waistcoat for a person or purpose of their choice.</p>
Spring term	<p><b>Mechanical systems: Making a pop-up book</b> Creating a four-page pop-up storybook design incorporating a range of mechanisms and decorative features, including: structures, levers, sliders, layers and spacers.</p>	<p><b>Drawing: Make my voice heard - coming soon!</b> Exploring art with a message, children look at the famous 'Guernica' by Picasso and the confronting works of Käthe Kollwitz. They develop their drawings to incorporate new surfaces, a range of techniques and demonstrate an emerging personal style.</p>
	<p><b>Drawing: I need space - coming soon!</b> Developing ideas more independently, pupils consider the purpose of drawings as they investigate how imagery was used in the 'Space race' that began in the 1950s. They combine collage and printmaking to create a piece in their own style.</p>	<p><b>Structure: Playgrounds</b> Designing and creating a model of a new playground featuring five apparatus, made from three different structures. Creating a footprint as the base, pupils visualise objects in plan view and get creative with their use of natural features.</p>
Summer term	<p><b>Food: What could be healthier?</b> Researching and modifying a traditional bolognese sauce recipe to make it healthier. Children cook their healthier versions, making appropriate packaging and learn about farming cattle.</p>	<p><b>Sculpture and 3D: Making memories - coming soon!</b> Documenting their memories of their time at primary school, children select their favourite art and design skills and techniques to design and create a 3D artwork to represent these memories.</p>
	<p><b>Painting and mixed media: Portraits</b> Investigating self-portraits by a range of artists, children use photographs of themselves as a starting point for developing their own unique self-portraits in mixed-media.</p>	<p><b>Digital world: Navigating the world</b> Programming a navigation tool to produce a multifunctional device for trekkers. Combining 3D objects to form a complete product in CAD 3D modelling software and presenting a pitch to 'sell' their product.</p>



This page shows recent updates to this document.

Date	Update
08.06.22	Replaced the Year 5 unit <i>Electronic greetings cards</i> with <i>Doodlers</i> p.4 and p.7
05.07.22	Updated Art and design links to reflect the units now available. Updated the description of <i>Tell a story</i> (p.5) and <i>Growing artists</i> (p.6)
06.07.22	Added rationale for selection of units