

Design and technology, and Art and design

Long term plan

This EYFS: Reception, Key stage 1 and Key stage 2 plan is designed for those schools who alternate between teaching Design and technology and Art and Design each half term. Schools must subscribe to **both** the Art and design and the Design and Technology subjects with Kapow primary to access all the lessons on this plan.

This document is regularly updated to reflect changes to our content. This version was created on 28.08.25 and the most recent version can always be found [here](#).

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Kapow
Primary™

Suggested long-term plan: A&D and D&T - Overview (Reception - Year 3)

As our units are shorter than six weeks, we have added some suggestions for stand-alone lessons.

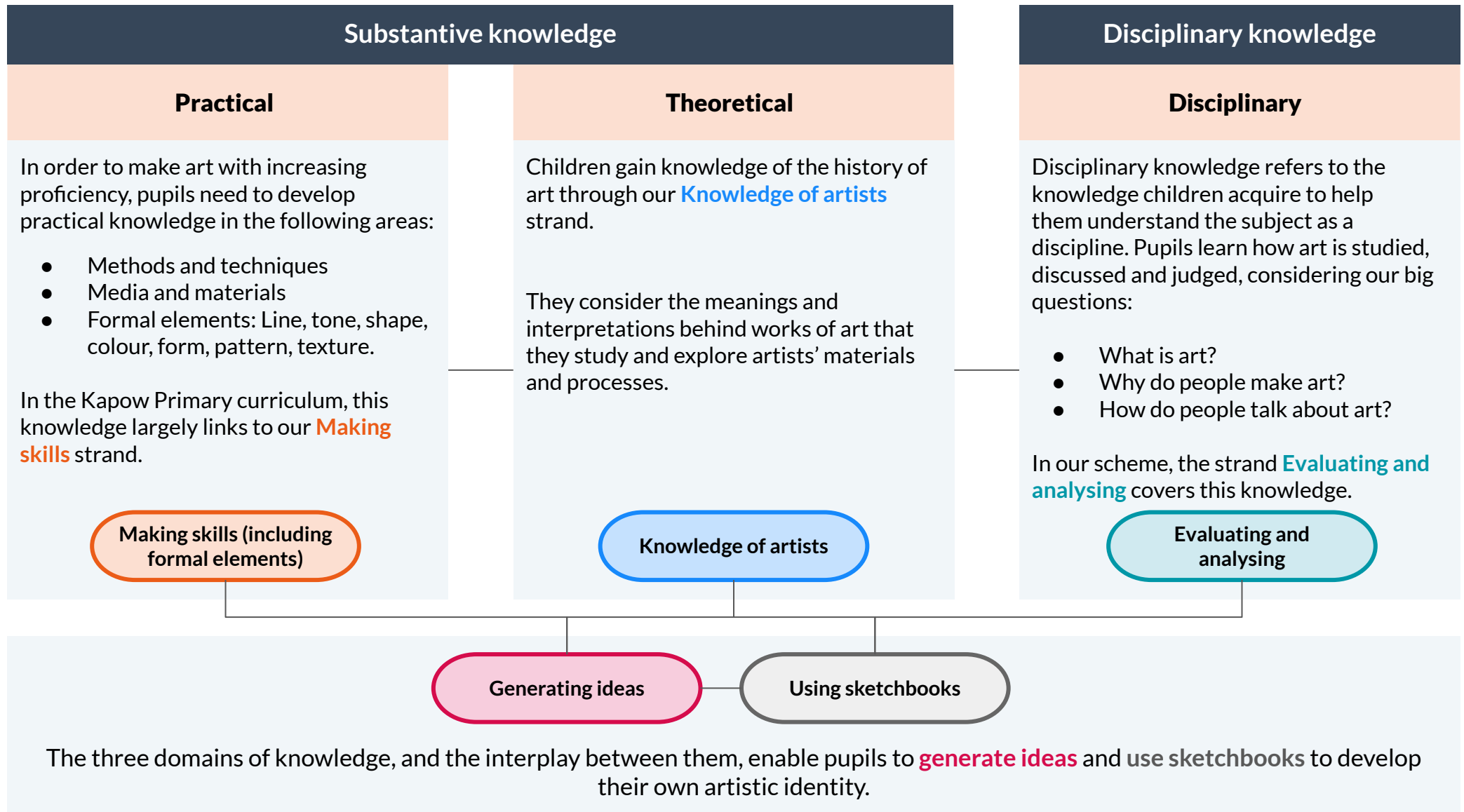
	Autumn term		Spring term		Summer term		Stand alone lessons
	Design and technology	Art and design	Design and technology	Art and design	Design and technology	Art and design	
EYFS: Reception	Structures: Junk modelling (6 lessons)	Drawing: Marvellous marks (6 lessons)	Textiles: Bookmarks (6 lessons)	Painting and mixed media: Paint my world (6 lessons)	Structures: Boats (6 lessons)	Sculpture and 3D: Creation station (6 lessons)	<p>Design and technology Unit: Seasonal projects - as and when relevant throughout the year.</p> <p>Art and design Seasonal Crafts as and when relevant throughout the year.</p>
Year 1	Option 1: Structures: stable structures (5 lessons) Option 2: Structures: Constructing a windmill (4 lessons)	Drawing: Exploring line and shape (5 lessons)	Textiles: Puppets (4 lessons)	Sculpture and 3D: Paper play (5 lessons)	Smoothies (6 lessons)	Painting and mixed media: Colour splash (5 lessons)	<p>Design and technology Option 1: Unit: Mechanisms: Matching slider game (Lesson 1 and/or 2) Option 2: Unit: Mechanisms: Making a moving storybook (Lesson 1)</p> <p>Art and design Unit: Craft: Woven wonders (Lesson 1, 2 and/or 3)</p>
Year 2	Drawing: Understanding tone and texture (5 lessons)	Structures: Baby bear's chair (4 lessons)	Painting and mixed media: Life in colour (5 lessons)	Mechanisms: Fairground wheel (5 lessons)	Sculpture and 3D: Clay houses (5 lessons)	Mechanisms: Making a moving monster (4 lessons)	<p>Design and technology Unit: Cooking and nutrition: Balanced diet (Lesson 1)</p> <p>Art and design Unit: Drawing: Tell a story (Lesson 2, 4 and /or 5)</p>
Year 3	Digital world: Wearable technology (6 lessons)	Developing drawing skills (5 lessons)	Structures: Constructing a castle (4 lessons)	Craft and design: Ancient Egyptian scrolls (5 lessons)	Cooking and nutrition: Eating seasonally (6 lessons)	Sculpture and 3D: Abstract shape and space (5 Lessons)	<p>Design and technology Unit: Textiles: Cross-stitch and appliqué (Lesson 1) Unit: Mechanical systems: Pneumatic toys (Lesson 1 and/or 2)</p> <p>Art and design Unit: Painting and mixed media: Prehistoric painting (Lesson 1, 3 and /or 4)</p>

As our units are shorter than six weeks, we have added some suggestions for stand-alone 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	
Year 4	Drawing: Exploring tone, texture and proportion (5 lessons)	Option 1: Structures: Helmets (5 lessons) Option 2: Structure: Pavilions (4 lessons)	Painting and mixed media: Light and dark (5 lessons)	Option 1: Mechanical systems: Mechanical cars (5 lessons) Option 2: Mechanical systems: Making a slingshot car (4 lessons)	Craft and design: Fabric of nature (5 lessons)	Electrical systems: Torches (4 lessons)	Design and technology Unit: Cooking and nutrition: Adapting a recipe (Lesson 2) Unit: Textiles: Fastenings (Lesson 1) Art and design Unit: Sculpture and 3D: Mega materials (Lesson 1, 2 and/or 5)
Year 5	Option 1: Electrical systems: Wobble bots (5 lessons) Option 2: Electrical systems: Doodlers (4 lessons)	Sculpture and 3D: Interactive installation (5 lessons)	Option 1: Mechanical systems: Gears and pulleys (5 lessons) Option 2: Mechanical systems: Making a pop-up book (4 lessons)	Drawing: Depth, emotion and movement (5 lessons)	Developing a recipe (6 lessons)	Painting and mixed media: Portraits (5 lessons)	Art and design Unit: Craft and design: Architecture (Lesson 3, 4 and/or 5)
Year 6	Craft and design: Photo opportunity (5 lessons)	Option 1: Textiles: Bags (5 lessons) Option 2: Textiles: Waistcoats (4 lessons)	Drawing: Expressing ideas (5 lessons)	Structure: Playgrounds (4 lessons)	Sculpture and 3D: Making memories - (5 lessons)	Digital world: Navigating the world (5 lessons)	Art and design Unit: Painting and mixed media: Artist study (Lesson 1, 4 and/or 5)

Types of knowledge in Art and design

In response to the [Ofsted research review series: Art and design](#) publication (Ofsted, 2023) we have shown how the different types of knowledge build in our progression of skills for Art and design. This page shows how those forms of knowledge are interconnected.



Oracy in **Art and design** and **Design and technology**

‘Oracy is the ability to speak eloquently, to articulate ideas and thoughts, to influence through talking, to collaborate with peers and to express views confidently and appropriately.

Oracy refers both to the development of speaking and listening skills, and the effective use of spoken language in teaching and learning. It is to speech what literacy is to reading and writing, and numeracy is to Maths.’

Speak for Change: Final report and recommendations from the Oracy All-Party Parliamentary Group Inquiry.

Learning *through* talk

At Kapow Primary, we believe it's crucial to provide pupils with opportunities for exploratory talk during their learning. This involves thinking aloud, questioning, discussing, and collaboratively building ideas.

Learning *to* talk

Similarly, developing oracy skills is essential for pupils to express and articulate themselves effectively across various contexts and settings, including formal ones like public speaking, debates, and interviews.

Through our **Art and design** curriculum, pupils have opportunities to develop their oracy skills by:

- Explaining and justifying their choices of materials, methods, and techniques.
- Engaging in paired and group discussions.
- Presenting and explaining their artwork and ideas to peers and the class.
- Analysing and critiquing the work of others as well as established artists.
- Collaborating on group artwork.
- Responding to high-level questions such as ‘What is art?’ by articulating and defending their ideas.

Through our **Design and technology** curriculum, pupils have opportunities to develop their oracy skills by:

- Presenting their design ideas or products to audiences of different sizes.
- Explaining designs, preferences or final products.
- Role-playing from the point of view of the user.
- Discussing products and design ideas using new vocabulary.
- Collaborating by organising tasks within a group.
- Critiquing others’ designs and products.
- Reflecting on and responding to feedback towards their own designs and products.
- Summarising design ideas.

	Year 1	Year 2
Autumn term	<p>Option 1: Structures: Stable structures Understand what structures are and where we find them. Explore some ways to make structures more stable. Design a stable product (a pencil pot) for a specific user. Begin to use technical skills such as cutting evenly spaced cuts and joining parts of a structure using an appropriate method.</p> <p>Option 2: Structures: Constructing windmills Construct a windmill to complete a request from a user. Develop an understanding of different types of windmill, how they work and their key features. Begin to use technical skills such as making evenly spaced cuts and adding weight to ensure a successful structure.</p>	<p>Drawing: Understanding tone and texture Developing drawing skills by exploring and experimenting with a range of materials, the children make marks that suggest surface texture and light and dark. They learn how to build a drawing by sketching basic shapes and adding detail, leading to a final observational piece that shows an emerging understanding of shading and texture.</p>
	<p>Drawing: Exploring line and shape Exploring line and shape through a range of materials and stimuli, children develop control and creativity as they investigate the work of artists Bridget Riley and Paul Klee. Inspired by these artists, the children experiment with expressive mark-making and portrait drawing. They learn how lines can vary in appearance and form shapes and begin to recognise shapes within forms to help them draw more accurately.</p>	<p>Structures: Baby bear's chair 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>Textiles: Puppets 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>Painting and mixed media: Life in colour Taking inspiration from the collage work of artist Romare Bearden, children consolidate their knowledge of colour mixing and create textures in paint using different tools. They create their own painted paper in the style of Bearden and use it in a collage, linked to a theme suited to their topic or classwork.</p>
	<p>Sculpture and 3D: Paper play 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. There are opportunities to extend learning to make a collaborative sculptural piece based on the art of Louise Bourgeois.</p>	<p>Mechanisms: Fairground wheel Design and create a functional fairground wheel, consider how the different components fit together so that the wheel rotates and the structure stands freely. Select appropriate material properties and develop their cutting and joining skills. Research existing structures and survey to further inform the design.</p>
Summer term	<p>Cooking and nutrition: Smoothies (6 lessons) Handle and explore fruits and vegetables and learn how to identify fruit, before undertaking taste testing to establish chosen ingredients for a smoothie they will make, with accompanying packaging.</p>	<p>Sculpture and 3D: Clay houses 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>Painting and mixed media: Colour splash Exploring colour mixing through paint play, children use a range of tools and work on different surfaces. They create paintings inspired by Clarice Cliff and Jasper Johns.</p>	<p>Mechanisms: Making a moving monster 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><u>Cooking and nutrition: Eating seasonally</u> (6 lessons) Pupils discover when and where fruits and vegetables are grown and learn about seasonality in the UK. They respond to a design brief to design a seasonal food tart using ingredients harvested in the UK in May and June.</p>	<p><u>Drawing: Exploring tone, texture and proportion</u> Exploring tone, texture and proportion to create realistic and expressive drawings, the children take inspiration from artists Sarah Graham, Nicola McBride and Beatriz Milhazes. Using sweets, wrappers and bold patterns as stimuli, the children develop skills in shading, mark-making and composition to produce detailed drawings with a strong sense of form and proportion.</p>
	<p><u>Developing drawing skills</u> Developing drawing skills through observation, shape and tone, the children practise drawing objects using simple shapes, building even tones with pencil and adding detail by closely observing pattern and texture. They apply these skills in imaginative plant drawings and explore how to recreate their ideas as digital artwork.</p>	<p>Option 1: <u>Structures: Helmets</u> Exploring shell structures and how they are strengthened to protect or contain. Creating a helmet for a specific user and strengthening it using layering. Option 2: <u>Structures: Pavilions</u> 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><u>Digital world: Wearable technology</u> Design, code and promote a piece of wearable technology to use in low light conditions, developing their understanding of programming to monitor and control products to solve a design scenario.</p>	<p><u>Painting and mixed media: Light and dark</u> 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><u>Craft and design: Ancient Egyptian scrolls</u> Learning about the way colour, scale and pattern influenced ancient Egyptian art, children explore the technique of papermaking to create a papyrus-style scroll. Ideas are extended to create a modern response by designing a 'zine'.</p>	<p><u>Mechanical systems option 1: Mechanical cars</u> Pupils build three prototype mechanical cars and select the best features to design their final product: a mechanical car kit. They create design criteria, conduct competitor market research and act as customers to provide feedback. <u>Mechanical systems option 2: Making a slingshot car</u> 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><u>Structures: Constructing a castle</u> 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><u>Craft and design: Fabric of nature</u> Using flora and fauna of tropical rainforests as a starting point, children develop drawings through experimentation and textile-based techniques to a design a repeating pattern suitable for fabric.</p>
	<p><u>Sculpture and 3D: Abstract shape and space</u> 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><u>Electrical systems: Torches</u> 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><u>Electrical systems: Wobble bots</u> Exploring circuits, introducing motors and learning about how they are used in everyday products. Pupils investigate how to make wobble bots that use an off-centre weight on the motor's axle to create a wobbling motion. Pupils then design and make a new product for a user using the results from their investigations.</p> <p><u>Electrical systems: Doodlers</u> 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><u>Craft and design: Photo opportunity</u> Exploring photography as a medium for expressing ideas, pupils investigate scale and composition, colour and techniques for adapting finished images. They use digital media to design and create photographic imagery for a specific design brief.</p>
	<p><u>Sculpture and 3D: Interactive installation</u> Using inspiration of historical monuments and modern installations, children plan by researching and drawing, a sculpture to fit a design brief. They investigate scale, the display environment and possibilities for viewer interaction with their piece.</p>	<p>Option 1: <u>Textiles: Bags</u> Design bags for a specific user using pattern piece templates. Choose features to add to the designs that are aesthetic or functional. Sew features onto the bags, such as fastenings and pockets.</p> <p>Option 2: <u>Textiles: Waistcoats</u> 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><u>Mechanical systems option 1: Gears and pulleys</u> Investigate the history, mechanics, and uses of gears and pulleys. Construct a gear and pulley system and design an eco-bike that utilises energy from an exercise bike for practical work.</p> <p><u>Mechanical systems option 2: Making a pop-up book</u> 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><u>Drawing: Expressing ideas</u> Exploring how drawing can be used to express ideas and messages, the children take inspiration from a range of street art examples. They investigate how artists use perspective, scale and proportion to create impact, then develop these skills to design and create a street art-inspired final piece about sustainability and the environment.</p>
	<p><u>Drawing: Depth, emotion and movement</u> Exploring how drawing can express emotion, movement and depth, the children take inspiration from artists Charlie Mackesy and Elizabeth Catlett. They use expressive lines and marks to convey feeling and energy, develop shading techniques to show depth and form and investigate composition through drawing and printmaking. This leads to a final piece that combines personal ideas with artist influence.</p>	<p><u>Structures: Playgrounds</u> 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><u>Cooking and nutrition: Developing a recipe (6 lessons)</u> Research and modify a traditional bolognese sauce recipe to improve the nutritional value. Cook improved version and create packaging that fits design criteria. Learn about where beef comes from.</p>	<p><u>Sculpture and 3D: Making memories</u> Creating a personal memory box using a collection of found objects and hand-sculptured forms, reflecting primary school life with symbolic and personal meaning.</p>
	<p><u>Painting and mixed media: Portraits</u> 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><u>Digital world: Navigating the world</u> 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>