

# **Design and Technology Policy**

# **Autumn Term 2025**

Review frequency: Every three years		Review date:	Autumn Term 2028	
Governing committee responsible:		Pupils, Strategy & Resources committee		
Governor approval: No		Website:	Yes	
Staff responsible: Subject Leader Head Teacher		Date produced:	Autumn Term 2025	

#### Introduction:

### Purpose:

We introduced a new scheme for teaching Art and design and Design and Technology in 2024/2025. Following Kapow for our Design and technology scheme of work aims to inspire pupils to become curious, creative and innovative thinkers with a broad understanding of how products are designed and made, in other words, to think like designers and engineers. The intention is for pupils to develop the confidence to identify problems, generate ideas, plan and create products and evaluate their outcomes.

We aim to raise pupils' awareness of how design and technology shape the way they live, work and interact with the world. The new scheme encourages pupils to become resourceful, enterprising individuals who have the skills to contribute to and improve the world around them. The curriculum is designed to be both accessible and ambitious, ensuring all learners' full participation and potential achievement.

Our Design and technology curriculum is structured around four strands that run through every unit:

- Design.
- Make.
- Evaluate.
- Technical knowledge.

These strands ensure a balanced coverage of the substantive, disciplinary and procedural knowledge pupils need to progress in Design and technology.

They support the development of creativity, problem-solving and technical understanding, preparing pupils to design purposeful, functional products with increasing independence and confidence.

The Design and Technology is split into six key areas:

- Structures.
- Mechanisms/Mechanical systems.
- Textiles.
- Cooking and nutrition.
- Electrical systems.
- The digital world.

Our curriculum alternates between Art and design and Design and technology each half term, ensuring objectives from both curriculum areas of covered.

# **Procedures and practice:**

# Intent

The Design and technology scheme of work aims to inspire pupils to be innovative and creative thinkers who have an appreciation for the product design cycle through ideation, creation, and evaluation. We want pupils to develop the confidence to take risks, through drafting design concepts, modelling, and testing and to be reflective learners who evaluate their work and the work of others. Through the scheme of work, we aim to build an awareness of the impact of design and technology on our lives and encourage pupils to become resourceful, enterprising citizens who will have the skills to contribute to future design advancements.

The Design and technology scheme of work enables pupils to meet the end of key stage attainment targets in the National curriculum and the aims also align with those in the National curriculum. EYFS (Reception) units provide opportunities for pupils' to work towards the Development matters statements and the Early Learning Goals. We aim to inspire children and young people to create, experience, and participate in great arts and culture.

# **Implementation**

The Design and technology National curriculum outlines the three main stages of the design process: design, make and evaluate. Each stage of the design process is underpinned by technical knowledge which encompasses the contextual, historical, and technical understanding required for each strand. Cooking and nutrition\* has a separate section, with a focus on specific principles, skills and techniques in food, including where food comes from, diet and seasonality. The National curriculum organises the Design and technology attainment targets under four subheadings: Design, Make, Evaluate, and Technical knowledge. We have taken these subheadings to be our Kapow Primary strands:

- Design
- Make
- Evaluate
- Technical knowledge

Cooking and nutrition is given a particular focus in the National curriculum and we have made this one of our six key areas that pupils revisit throughout their time in primary school:

- Cooking and nutrition
- Mechanisms/ Mechanical systems
- Structures
- Textiles
- Electrical systems (KS2 only)
- Digital world (KS2 only)

Following Kapow Primary's Design and technology, the scheme has a clear progression of skills and knowledge within these strands and key areas across each year group.

Below are the Art and design units covered in each year group, each term. Half of each term has an Art and design unit and the other half term has a Design and Technology unit:

	Autumn Term		Spring Term		Summer Term	
	Art and	Design and	Art and	Design and	Art and	Design and
	Design	technology	Design	technology	Design	technology
Year 1	Drawing:	Structures:	Sculpture and	Textiles:	Painting and	Cooking and
	Exploring line	Constructing	<b>3D:</b> Paper	Puppets	mixed media:	nutrition:
	and shape	windmills	play		Colour splash	Smoothies
Year 2	Drawing:	Structures:	Painting and	Mechanisms:	Sculpture and	Mechanisms:
	Understanding	Baby bear's	mixed media:	Fairground	<b>3D:</b> Clay	Making a
	tone and	chair	Life in colour	wheel	houses	moving
	texture					monster
Year 3	Drawing:	Cooking and	Craft and	Digital world:	Sculpture and	Structures:
	Developing	<b>Nutrition:</b>	design:	Wearable	<b>3D:</b> Abstract	Constructing a
	drawing skills	Eating	Ancient	technology	shape and	castle
		seasonally	Egyptian		space	
			scrolls			
Year 4	Drawing:	Structures:	Painting and	Mechanical	Craft and	Electrical
	Exploring	Bridges	mixed media:	systems:	design: Fabric	systems:
	tone, texture		Light and dark	Mechanical	of nature	Torches
	and			cars		
	proportion					
Year 5	Sculpture and	Electrical	Drawing:	Mechanical	Painting and	Cooking and
	<b>3D:</b> Interactive	systems:	Depth,	systems:	mixed media:	nutrition:
	instillation	Doodlers	emotion and	Gears and	Portraits	Developing a
			movement	pulleys		recipe
Year 6	Craft and	Textiles:	Drawing:	Structures:	Sculpture and	Digital world:
	design: Photo	Bags/	Expressive	Playgrounds	<b>3D:</b> Making	Navigating
	opportunity	Waistcoats	ideas		memories	the world

Through this scheme, pupils respond to design briefs and scenarios that require consideration of the needs of others, developing their skills in the six key areas. Each of our key areas follows the design process (design, make and evaluate) and has a particular theme and focus from the technical knowledge or cooking and nutrition section of the curriculum. The Kapow Primary scheme is a spiral curriculum, with key areas revisited again and again with increasing complexity, allowing pupils to revisit and build on their previous learning. Lessons incorporate a range of teaching strategies from independent tasks, paired and group work including practical hands-on, computer-based and inventive tasks. This variety means that lessons are engaging and appeal to those with a variety of learning styles. Differentiated guidance is available for every lesson to ensure that lessons can be accessed by all pupils and opportunities to stretch pupils' learning are available when required. Knowledge organisers for each unit support pupils in building a foundation of factual knowledge by encouraging recall of key facts and vocabulary. Strong subject knowledge is vital for staff to be able to deliver a highly effective and robust Design and technology

curriculum. Each unit of lessons includes multiple teacher videos to develop subject knowledge and support ongoing CPD.

# **Impact**

The impact can be constantly monitored through both formative and summative assessment opportunities. Each lesson includes guidance to support teachers in assessing pupils against the learning objectives. Furthermore, each unit has a unit quiz and knowledge catcher which can be used at the start and/ or end of the unit. After the implementation of Kapow Primary Design and technology, pupils should leave school equipped with a range of skills to enable them to succeed in their secondary education and be innovative and resourceful members of society. The expected impact of following the Kapow Primary Design and technology scheme of work is that children will:

- Understand the functional and aesthetic properties of a range of materials and resources.
- Understand how to use and combine tools to carry out different processes for shaping, decorating, and manufacturing products.
- Build and apply a repertoire of skills, knowledge and understanding to produce high quality, innovative outcomes, including models, prototypes, CAD, and products to fulfil the needs of users, clients, and scenarios.
- Understand and apply the principles of healthy eating, diets, and recipes, including key processes, food groups and cooking equipment.
- Have an appreciation for key individuals, inventions, and events in history and of today that impact our world.
- Recognise where our decisions can impact the wider world in terms of community, social and environmental issues.
- Self-evaluate and reflect on learning at different stages and identify areas to improve.
- Meet the end of key stage expectations outlined in the National curriculum for Design and technology.
- Meet the end of key stage expectations outlined in the National curriculum for Computing.

# Roles and responsibilities:

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The Governors ensure this policy links to the whole school approach to teaching and learning and have approved this policy.

Head teacher:

To ensure staff adhere to and uphold the policy.

Teachers:

The teaching of design and technology are in line with The National Curriculum and should equip pupils to ask perceptive questions, think critically, weigh evidence, sift arguments, and develop perspective and judgement. Teachers use a range of teaching and learning styles including; whole class teaching, talk partners, mixed ability groups, key questioning to promote higher order thinking and discussions and debates. Each year, time is set aside to review standards and monitor curriculum provision to ensure training and resources are up to date.

# Pupils:

To demonstrate a conscientious attitude towards their learning of design and technology with an aim to be the best they can be.

#### Parents and carers:

To support the teaching and learning of design and technology, parents and carers are welcomed and invited in to lessons as well as the yearly exhibition created by the pupils. They also support children when completing creative homework linked to our Clarborough Curriculum.

# **Aspects:**

#### Equal opportunities:

The design and technology curriculum is differentiated to suit the needs of all children, including those with special educational needs and disabilities. We take into account the targets set for individual children in their Individual Support Plans (ISPs). All necessary adaptations will be made to enable all children to access the curriculum. Design and technology provides excellent opportunities to enhance the learning of more able pupils through the development of higher order thinking skills, creativity and self-expression.

# Health and Safety:

Visits and fieldwork are an essential part of the design and technology curriculum helping to develop artistic knowledge and skills. Children learn best when the learning environment is ordered and they feel safe, any visit should be well organised and provide a stimulating and valuable experience. The pupils should prepare well for the visit and, on their return, use the experience to good effect in the classroom. The class teacher, or leader, should plan the visit meticulously using Evolve and liaising with the Education Visits coordinator. The pupils' safety and welfare is paramount. Please see the Policy for Educational Visits for detailed information. All teaching staff have also undertaken their 'food hygiene' safety training, essential for planning and delivering the nutrition units in Design and technology.

# Sketchbooks

Children are given a sketch pad as they begin in Year 1. They are encouraged to develop the habit of using their sketchbooks for:

- Recording, exploring and storing visual and other information e.g. notes and selected materials which can readily be retrieved and used as reference,
- Working out ideas, plans and designs.
- Reference as they develop ideas for their work
- Looking back at and reflecting on their work, reviewing and identifying their progress.
- As an ongoing record of their learning and achievement, which they can use to further develop their ideas, skills and understanding.

Sketchbooks will move through the school as the children progress from one year to another, and across key stages. From September 2025, we introduced separate sketch pads for Art and Design and Design and Technology.

### Assessment:

As good practitioners we are continually assessing our pupils at Clarborough Primary School. All teachers are responsible for monitoring standards using the assessment procedures described in this policy. This is overseen by the Art and Design/ Design and Technology coordinator on a termly basis. Children's attainment in design and technology will be recorded each term using the 'Assessing Foundation Subjects' document on FFT. The objectives are in line with the units taught. Furthermore, the assessment of the children's work, skills and knowledge will be measured against the following:

- Written work/ end of unit quizzes
- Questions and answers.
- Whole class and group discussions.
- Discussion between individual children and the teacher observation.
- Comparison with relevant level descriptors.
- Comparison with key stage programmes of study.

# Monitoring and evaluation:

The Art and Design/ Design and Technology co-ordinator is also responsible for the ongoing monitoring cycle. Every term they will carry out book scrutinies, monitor planning for coverage and pupil voice interviews. Here feedback will be collected, evaluated and then shared with staff to help inform their planning.

#### **Conclusion:**

The Design and Technology co-ordinator is also responsible for the production and implementation of the action plan. The co-ordinator is responsible for the curriculum

mapping for the subject and for providing detailed resources. The subject leader will also report to governors over each year with detailed information of this subject, including attainment and progress across the school as well as progress towards objectives in the yearly action plan.