



Our Vision

Our vision is that every child will fulfil their potential, flourish as individuals who are prepared for the next stage of their life, growing as responsible citizens and lifelong learners.

Our Ethos

Putting the needs of every child at the heart of everything we think, say and do.

our Values

Respect, Equality, Resilience, Courage, Awareness and Collaboration

D.T. Curriculum at Culverstone Green Primary School

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Respect	Awareness	Equality	Collaboration	Courage	Resilience
Term 1	Mechanisms – Making a Storybook	Mechanisms – Making a moving monster	Electrical systems – Electric poster	Mechanical systems – Making a slingshot car	Mechanical systems – Making a pop-up book	Digital World – Navigating the World
Term 2			Structures – Constructing a castle	Electrical systems - Torches	Digital World – Monitoring devices	Textiles - Victorian Waistcoats
Term 3	Textils – Puppets	Cooking and nutrition – Balanced diet	Mechanical systems – Pneumatic toys	Digital World – Mindful moments timer	Cooking and Nutrition – Developing a recipe	Structures - Playgrounds
Term 4	Mechanisms – Wheels and Axles	Structures – Baby Bear’s chair	Digital World – Wearable technology	Cooking and nutrition – Adapting a recipe	Structures - Bridges	Electrical Systems – Steady Hand game
Term 5	Cooking and Nutrition - Smoothies	Textiles - Pouches	Textiles – Cross stitch and	Structures - Pavilions	Textiles – Stuffed Toys	Cooking and Nutrition – Come

			applique: Egyptian collars			Dine With Me (link to rationing)
Term 6	Structures – Creating a Windmill	Mechanisms – Fairground wheel	Cooking and Nutrition – Eating seasonally	Textiles - Fastenings	Electrical Systems - Doodlers	Mechanical Systems – Automated toys

N.B. In Reception opportunities for Creative Development ongoing throughout the year and linked to children’s interests.

Intent:

At Culverstone Green Primary School we are passionate about ensuring all children can show their creativity, individuality and imagination. Art is a subject that allows all our children to show all these attributes as well as developing skills and knowledge around the subject. We use a scheme of work called ‘Kapow’ to support our teaching of Art. Kapow Primary’s revised Art and design scheme of work aims to inspire pupils and develop their confidence to experiment and invent their own works of art. The scheme is written by experts in their field and designed to give pupils every opportunity to develop their ability, nurture their talent and interests, express their ideas and thoughts about the world, as well as learning about art and artists across cultures and through history. Kapow Art and design scheme of work aims to inspire pupils and develop their confidence to experiment and invent their own works of art. The scheme is written by experts and designed to give pupils every opportunity to develop their ability, nurture their talent and interests, express their ideas and thoughts about the world, as well as learning about the rich heritage and culture of the British Isles and beyond. The scheme is adapted to meet the needs of all children at Culverstone Green Primary School.

Kapow supports pupils to meet the National Curriculum end of key stage attainment targets and has been written to fully cover the National Society for Education in Art and Design’s progression competencies. To extend the children’s own creativity we have added in our own opportunities at the end of each unit for the children to design or invent their own pieces of work that may be inspired by the artists they have learnt about and incorporates the skills they have been developing.

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

Kapow Primary's Design and technology scheme has a clear progression of skills and knowledge within these strands and key areas across each year group. Our National curriculum overview shows which of our units cover each of the National curriculum attainment targets as well as each of the four strands. Our Progression of skills shows the skills and knowledge that are taught within each year group and how these skills develop to ensure that attainment targets are securely met by the end of each key stage.

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)

Through Kapow Primary's Design and technology 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. Kapow Primary has been created with the understanding that many teachers do not feel confident delivering the full Design and Technology curriculum and every effort has been made to ensure that they feel supported to deliver lessons of a high standard that ensure pupil progression.

Impact

The impact of Kapow Primary's scheme 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.

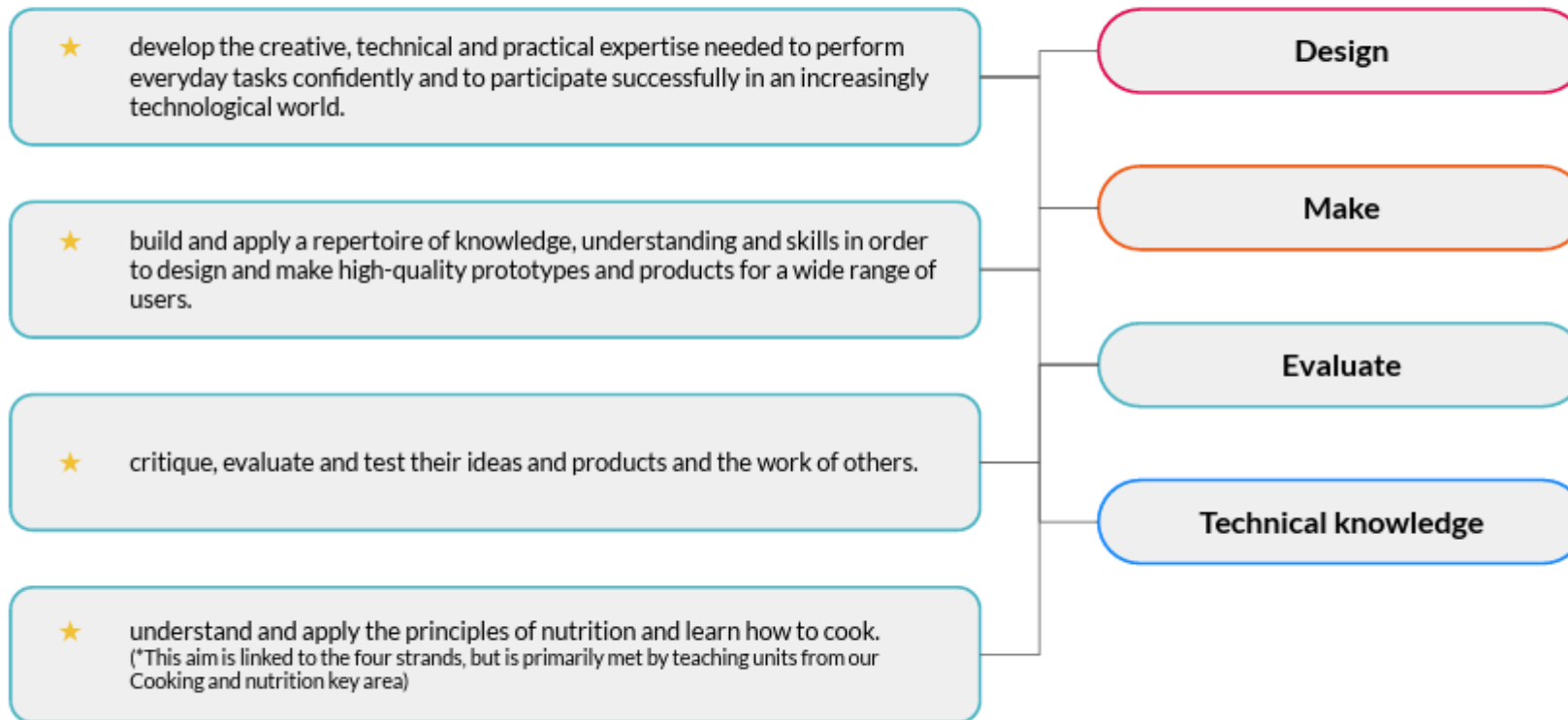
The expected impact of following the Kapow Primary Design and technology scheme of work is that children will:

- 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.

How does Kapow Primary's scheme of work align with the National Curriculum?

Our scheme of work fulfils the statutory requirements outlined in the **national curriculum (2014)**. The national curriculum Programme of study for Design and technology aims to ensure that all pupils:

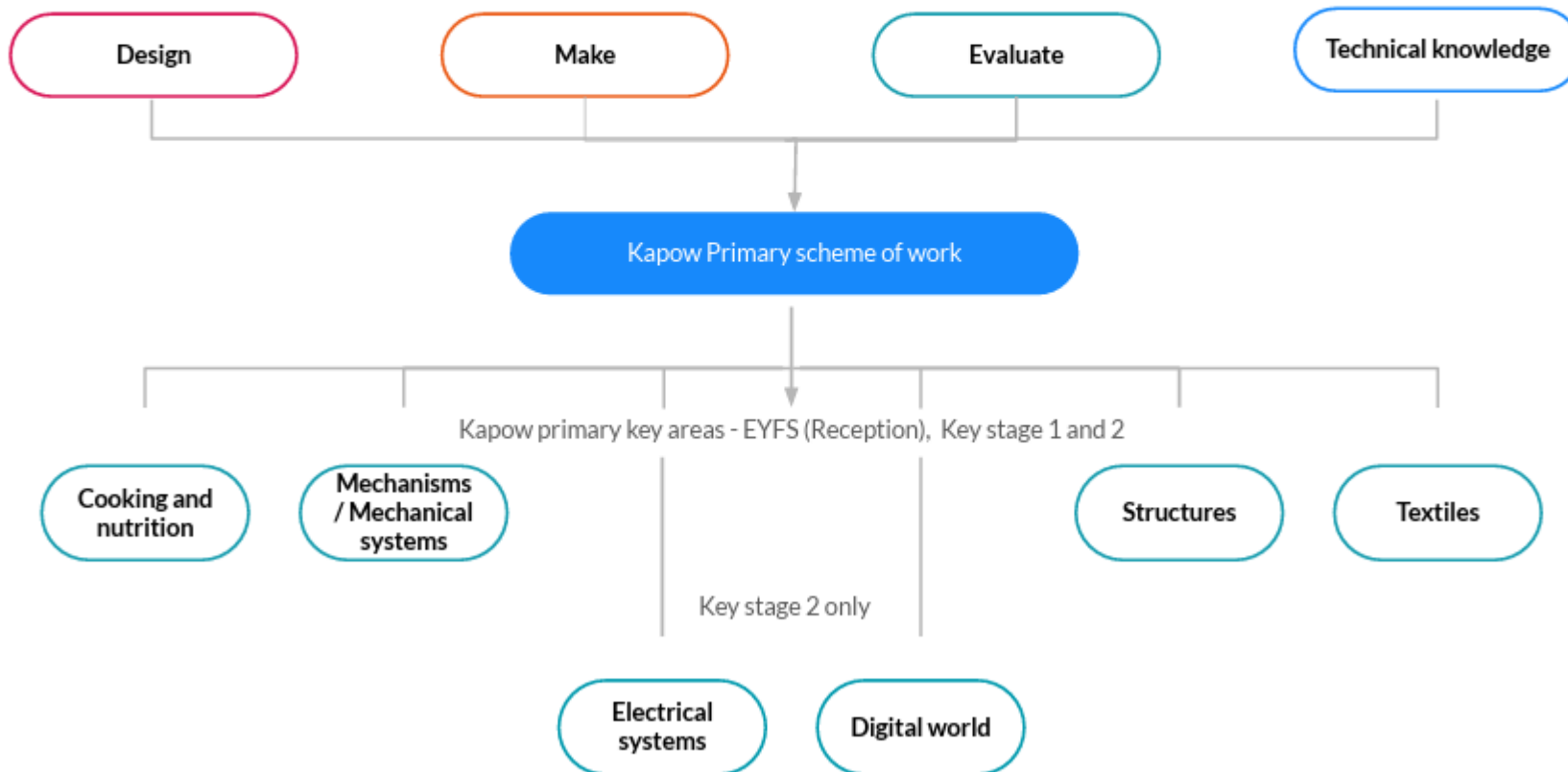
We have identified four key strands which run throughout our scheme of work:



Our [D&T: National curriculum overview](#) document shows which of our units cover each of the National curriculum attainment targets and strands above. Each lesson plan references the relevant National curriculum objectives, along with cross-curricular links to any other subjects. For EYFS (Reception) links are made to Development matters and the Early Learning Goals.

The Subject Leader monitors Art through learning walks, book looks, observations and ensures staff have the CPD needed to deliver the D.T. Curriculum.

How is the Design and technology scheme of work organised?



Key areas

The six key areas are revisited each year, with Electrical systems and Digital world beginning in KS2. The areas enable all subject leads, specialists or non-specialists, to understand and make it easy for teachers to see prior and future learning for your pupils. You can see, at a glance, how the unit you are teaching fits into their wider learning journey.

EYFS (Reception) Key Stage 1 and 2

Cooking and nutrition

Where food comes from, balanced diet, preparation and cooking skills. Kitchen hygiene and safety. Following recipes.



Mechanisms/ Mechanical systems

Mimic natural movements using mechanisms such as cams, followers, levers and sliders.



Key Stage 2

Structures

Material functional and aesthetic properties, strength and stability, stiffen and reinforce structures.



Textiles

Fastening, sewing, decorative and functional fabric techniques including cross stitch, blanket stitch and appliqué.



Electrical systems

Operational series circuits, circuit components, circuit diagrams and symbols, combined to create various electrical products.



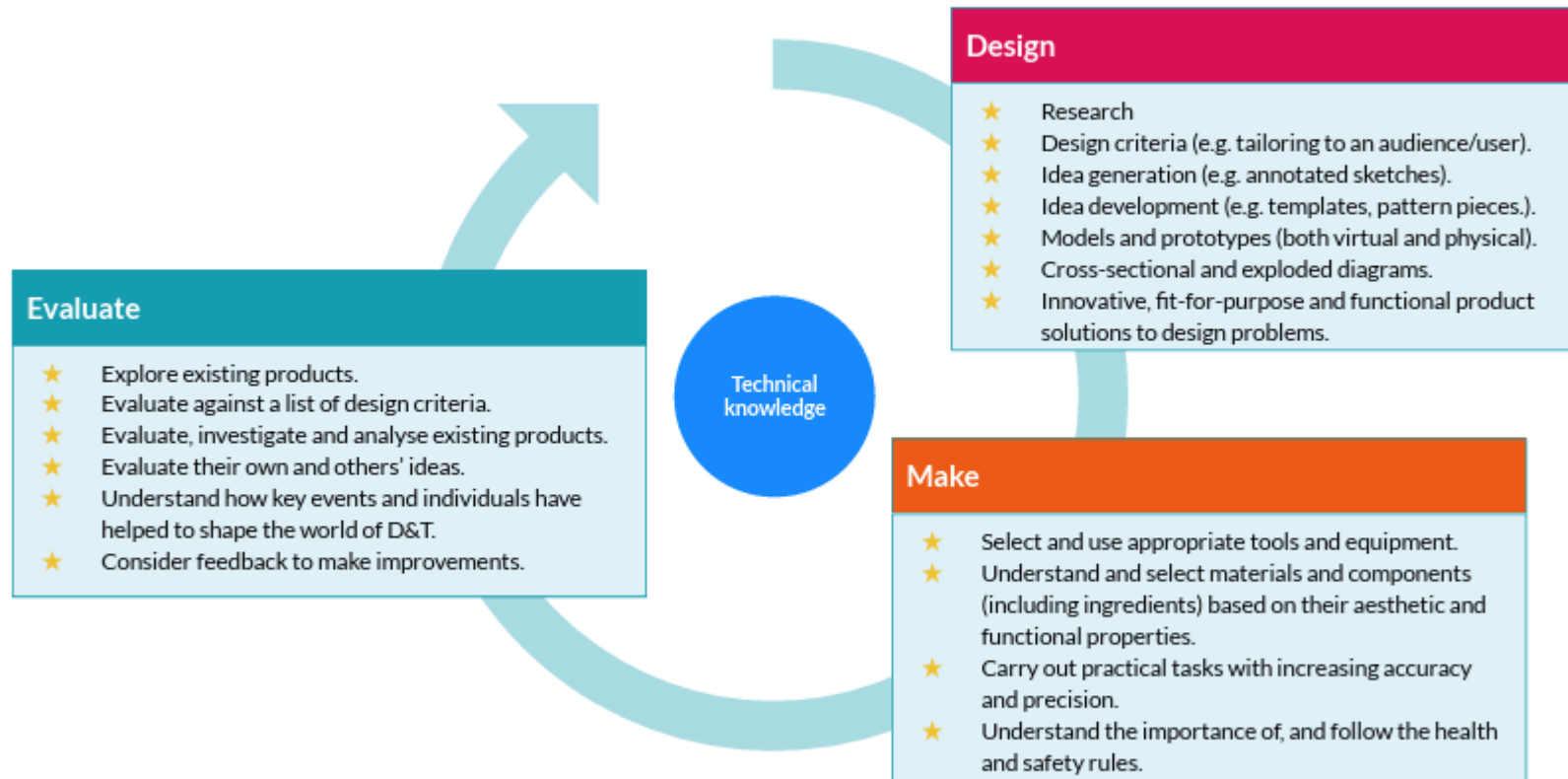
Digital world

Program products to monitor and control, develop designs and virtual models using 2D and 3D CAD software.



The design process

The Design and technology National Curriculum outlines the three main stages of the design process: design, make and evaluate. Each Kapow Primary unit follows these stages, to form a full project. 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 in the D&T National Curriculum, with additional focus on specific principles, skills and techniques in food, including where food comes from, diet and seasonality. Cooking and nutrition units still follow the design process summarised above, for example by tasking the pupils to develop recipes for a specific set of requirements (design criteria) and to suggest methods of packaging the food product including the nutritional information.