



St Michael's CE Primary School

Design Technology Curriculum
2026-2027

Courage to Flourish in the Love of God

Curriculum Intent

At St Michael's CE Primary, our Design and Technology curriculum is rooted in our vision, 'Courage to Flourish in the Love of God'. We believe design enables pupils to use their God-given creativity and problem-solving skills to explore, respond to and improve the world around them.

We aim to develop pupils as confident designers, makers and evaluators. Through purposeful opportunities, pupils are encouraged to take creative risks, develop practical skills and apply their knowledge to real-life contexts. They learn to design with care, make with accuracy and evaluate thoughtfully, building resilience and independence.

Our curriculum reflects our commitment to inclusion and ambition for all. Every pupil is supported to access and succeed in Design and Technology, developing confidence, perseverance and a sense of achievement regardless of their starting point.

In line with our whole-school curriculum, pupils explore design in different cultures and contexts, helping them to understand how products are created to meet the needs of users. This fosters respect, empathy and an awareness of how design impacts the wider world.

Over time, pupils develop the ability to think critically, solve problems and refine their ideas. By the end of primary school, they are equipped with the knowledge, skills and confidence to continue designing with creativity and purpose, prepared to flourish in the love of God.



Curriculum Implementation

Curriculum and Sequencing

The Design and Technology curriculum is delivered using Kapow Primary and is taught on a termly basis across the school.

The curriculum is carefully sequenced using a spiral approach, ensuring that pupils regularly revisit key knowledge and skills across the core areas of **Structures, Mechanisms, Cooking and Nutrition, Textiles, Digital World and Electrical Systems**.

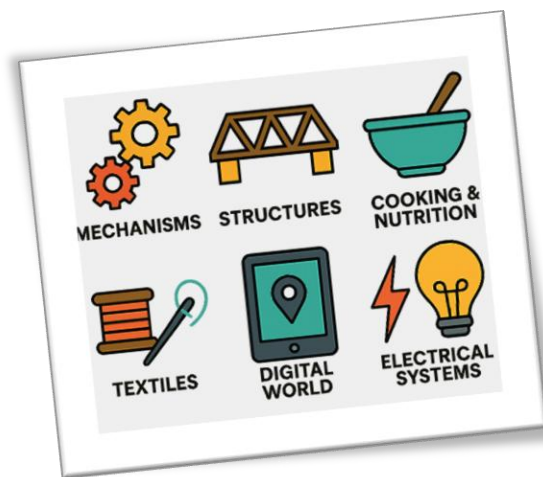
This cyclical structure enables the development of creativity, problem-solving and technical understanding, preparing pupils to design purposeful, functional products with increasing independence and confidence. Learning is designed so that key themes are revisited regularly, allowing pupils to deepen their understanding and refine their skills over time. Each return to a topic is more complex and cognitively demanding, helping to strengthen and extend previous knowledge.

Children build and apply a schema of knowledge and skills which enable them to design and make high-quality products. They can evaluate their ideas and products and the work of others. This includes the principles of nutrition and the ability to prepare meals.

Teaching and Learning Approaches

Lessons follow a structured sequence of modelling, guided practice, independent application and reflection, adapted to the **St Michael's lesson structure**. Teaching covers four key strands: **design, make, evaluate and technical knowledge**.

Teachers model techniques and vocabulary clearly, ensuring pupils understand processes before working independently. Pupils are given opportunities to become curious, creative and innovative thinkers with a broad understanding of how products are designed and made.



Knowledge and Vocabulary

Key vocabulary is explicitly taught at the start of lessons and revisited regularly. Retrieval practice through 'Do Now' activities reinforces prior learning and supports long-term retention.

The spiral curriculum ensures knowledge and vocabulary are built on over time, allowing pupils to deepen understanding and use subject-specific language with increasing confidence.

Practice, Application & Outcomes

Pupils regularly apply their knowledge and skills through practical work, working towards a final outcome in each unit. Time is given for exploration and evaluating existing products, refining specific skills, designing innovative solutions and testing their designs.

Exercise books are used to document the design cycle, record practical work and to support independence. Progression is seen in pupils' ability to make purposeful choices, control design sketches with increasing accuracy, and evaluate and refine their work.



Reading

Reading is central to our DT curriculum. During direct instruction, pupils engage with carefully chosen, age-appropriate texts that introduce key knowledge while explicitly teaching subject-specific vocabulary in context. Pupils develop fluency, comprehension and help broaden their understanding of the subject, equipping them with the language needed to discuss Design technology with confidence.

Resources

Our school is well resourced to deliver the Design and Technology curriculum. We have a dedicated food preparation area for cooking and nutrition, alongside a wide range of materials, tools and equipment to support textiles, structures, mechanisms, electrical systems and digital technologies. Resources are regularly reviewed and replenished to ensure pupils can safely design, make and evaluate high-quality products throughout their DT learning.



Assessment

Assessment is ongoing and linked to the St Michael's teaching and learning framework. 'Do Now' quizzes check prior learning, while exit quizzes assess understanding from each lesson. Teachers use questioning, observation and pupils' work to inform next steps and support progress.



Diversity

A diverse Design and Technology curriculum helps to challenge stereotypes, broaden perspectives and celebrate design as a practical, creative and culturally-rich human endeavour.

Kapow Primary's Design and Technology scheme supports this by:

- Showcasing diverse designers from different backgrounds, genders and cultures.
- Exploring different forms of design products from various cultures, allowing pupils to learn about global design heritage.
- Highlights influential figures offering pupils a broader perspective on who can be a designer.

Inclusion

Learning is adapted to meet the needs of all pupils through scaffolding, modelling, and flexible support. Tasks are accessible yet appropriately challenging, enabling all pupils to participate, develop skills, and express their ideas with increasing confidence and independence reflecting in the products, users and contexts they explore.



British Values

Design and Technology supports the promotion of British values by providing opportunities for pupils to engage in collaborative projects, working in teams and negotiating ideas during the different stages.

Through discussion and evaluation, pupils learn to respect different viewpoints and develop tolerance, mutual respect and appreciating diverse ideas. Lessons encourage independent design decisions and creativity, while collaborative activities help pupils understand fairness, shared responsibility and the value of diverse perspectives.

SMSC

The Kapow Primary Design and Technology scheme supports SMSC by encouraging children to:

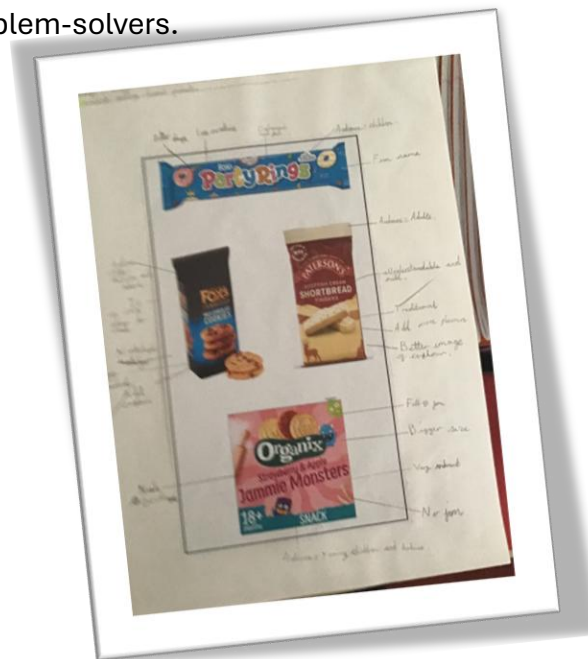
- Explore different perspectives.
- Reflect on ethical issues through themed units.
- Collaborate with others.
- Appreciate cultural diversity through subject-specific content.

Rights Respecting Schools

Our Design and Technology curriculum makes a significant contribution to our Rights Respecting Schools ethos by providing regular opportunities for pupils to solve problems,

develop practical skills and create purposeful products that meet the needs of themselves and others.

Through carefully sequenced learning, pupils fulfil Article 29 by developing creativity, resilience and practical life skills, Article 28 through access to a high-quality Design and Technology education, and Article 13 by expressing and communicating their ideas through designing and making. Pupils are encouraged to make informed choices, evaluate their work and respond to feedback, supporting Article 12, while collaborative projects and real-life design challenges promote Article 31, recognising every child's right to engage in creative and enriching activities. Together, these opportunities help pupils become confident, innovative and reflective designers and problem-solvers.



Curriculum Impact

The impact of the Design and Technology curriculum is seen in pupils' developing confidence, creativity and ability to think and work like designers, engineers and mathematicians. Over time, pupils build secure knowledge and skills, enabling them to produce purposeful and increasingly refined outcomes.

- Pupils will understand the functional and aesthetic properties of a range of materials and resources.
- Pupils use and combine tools to carry out different processes for shaping, decorating and manufacturing products.
- Pupils use subject-specific vocabulary accurately to discuss their own work and that of others.
- Exercise books and final pieces show clear development of ideas, creativity and technical skill over time.
- Pupils build and apply a repertoire of skills, knowledge and understanding to produce high quality, innovative outcomes to fulfil the needs of users and scenarios.
- Pupils can reflect on, evaluate and refine their work, showing resilience and a willingness to take creative risks.
- Pupils make connections and recognise where decisions can impact the wider world in terms of community, social and environmental issues.
- All pupils, including those with additional needs, access the curriculum and make progress from their starting points.
- Pupils leave primary school with confidence, curiosity and the skills to continue their creative learning.

Curriculum Map 2026-2027

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	Autumn	Spring	Summer
Nursery	DT Knowledge and Skills – See Nursery Curriculum for more detailed information		
Reception	Cooking and Nutrition Soup	Textiles: Bookmarks	Structures: Boats
Year 1	Structures: Stable Structures	Textiles: Simple Stitches	Cooking and Nutrition: Smoothies
Year 2	Structures: A Chair for Bear	Mechanism: Levers	Cooking and Nutrition: Balanced Diet
Year 3	Cooking and Nutrition: Eating Seasonally	Structures: Product Packaging	Textiles: Egyptian Collars
Year 4	Mechanisms: Mechanical Cars	Electrical Systems: Torches	Textiles: Fastenings
Year 5	Structure: Bridges	Cooking and Nutrition: Developing a Recipe	Digital World: Monitoring Devices
Year 6	Digital World: Navigating the World	Mechanisms: Automata Toys	Electrical Systems: Steady Hand Game

Spirituality

Our definition of spirituality at St Michael's CE Primary School:

To talk about spirituality is to talk about something which is beyond words.

Spirituality is linked to big questions about the meaning and purpose of life; it includes ideas relating to oneself, others, the natural world and the transcendent.

We refer to this as:

- The stillness of the mind
- The settling of the soul
- The uplifting of the spirit
- Being at one in the world and finding meaning and purpose in life.

For some, but not all, this will be experienced, expressed or explained through faith or belief.

When discussing this with our pupils, we refer to spirituality as:

The way **WOWS, OWS and NOWS** shape me into the person that I am and will become.

Spiritual development contains many facets and it is concerned with a number of areas of an individual's life. Therefore, when developing spirituality in pupils and adults, we, in line with our distinctively Christian vision and our school's definition for spirituality, look at four key areas: self, others, transcendence (beyond), and nature.



Spirituality Opportunities:

Self

Opportunities

- Opportunities to feel you're fully in the moment and doing something with care, can make you feel peaceful and calm.
- DT can help you feel connected to yourself and what you're doing in a mindful way.
- Have students design and create personal items that reflect their values, beliefs, and goals.
- Introduce activities that promote mindfulness and self-awareness.
- Encourage students to design and build projects that express their individuality.

Potential Question Prompts

- Reflect on the sources of inspiration in your life. How do these influences shape your designs and projects?
- Consider the ethical implications of your materials and processes. How do your personal values guide your decisions in DT?
- Reflect on what success means to you personally. Is it about functionality, aesthetics, or the impact on others?
- Consider the obstacles you encounter while designing. How do these experiences contribute to your growth and resilience?
- Reflect on the emotions you experience during the design process. What does creating mean to you on a personal level?
- Reflect on your attitudes toward mistakes in the design process. How can viewing failure as a learning opportunity help you grow?

Others

Opportunities

- Children being respectful of others creation, however remembering to give feedback is purposeful.
- Engage students in designing and creating items for community service.
- Organize group projects where students work together to solve a problem or create something meaningful that has an impact on others.
- Have students explore and create designs inspired by different cultures and religions, promoting understanding and respect for diversity.

Potential Question Prompts

- Reflect on how your creations address the needs or challenges faced by specific individuals or communities. What considerations do you take into account to ensure your designs are beneficial?
- Consider how your designs can be accessible to diverse groups of people. How can you ensure that your creations are welcoming and usable for everyone?
- Reflect on the importance of collaboration and input from peers or users. How do you incorporate their perspectives into your work?
- Consider the broader implications of your design choices. How can you create products that are sustainable and positively affect the community?
- Reflect on how your design capabilities can contribute to solving problems such as poverty, inequality, or health. What projects can you undertake that align with these goals?
- Consider how your creations can bring people together or enhance relationships. How can you design products that encourage collaboration and interaction among users.

Transcendence

Opportunities

- To explore the belief that this connects to something bigger than us.
- How creating is similar feeling to meditate or pray.
- To create or admire something that is well-designed and beautiful, it can make you feel connected to something greater, like the beauty of the world or even the creativity of others.
- Have students design models of spiritual spaces, such as meditation gardens or quiet reflection areas, to understand the importance of space in spiritual practices.
- Encourage students to design and create art pieces featuring inspirational quotes from various spiritual traditions, fostering a sense of connection to something greater.

Potential Question Prompts

- Reflect on the potential of your creations to challenge perceptions and provoke thought. What innovative ideas can you integrate to inspire change?
- Consider how your designs can address societal challenges or promote well-being. How can you ensure that your projects serve a higher purpose beyond personal gain?
- Think about the broader concepts your work might embody, such as love, justice, or sustainability. How can you incorporate these themes into your design process?
- Reflect on the long-term impact of your creations. How do you want your work to be remembered, and what values do you hope to pass on?
- Consider how your design process can serve as a medium for exploring deeper questions about existence, purpose, or the human experience. What themes resonate with you?
- Consider how you can create an experience through your work that invites reflection and connection. What elements can you incorporate to evoke emotions and thoughts?

Nature

Opportunities

- An understanding of where things come from and the impact this can have on the world. Eg paper from trees.
- Junk modelling to think about how we can reuse materials to create something new.
- Engage students in designing and building projects using recycled or natural materials, emphasizing the importance of sustainability and care for the environment.
- Involve students in designing and building elements for a school garden, such as planters, bird feeders, or compost bins, to connect with nature and learn about environmental stewardship.

Potential Question Prompts

- Could you be more environmentally friendly with the materials you have used?
- How can we use recycled or natural materials in our projects to show respect for the environment?
- What lessons can we learn from nature that can be applied to our design projects?
- How can we design projects that help protect and preserve natural habitats?
- In what ways can observing nature inspire your creativity and design ideas?
- What are some ways we can design products that reduce waste and promote sustainability?
- What role does nature play in different cultural and spiritual practices, and how can we reflect this in our designs?