SUBJECT ON A PAGE

Design and Technology

At Green Ridge, we believe that Design and Technology helps to prepare children for the developing world and encourages them to become curious and creative problem-solvers, both as individuals and as part of a team.

Intent – what we aim to do

- To develop imaginative thinking in children.
- To enable children to problem-solve and evaluate what they are designing and making.
- To enable children to talk about how things work.
- To encourage children to select appropriate tools and techniques for making a product.
- To foster enjoyment, satisfaction and purpose in designing and making.
- To use ICT software to assist designing and learning.
- To introduce pupils to the language and vocabulary of Design and Technology.

Implementation – how do we achieve our aims?

The Reach2 scheme of work teaches practical approaches to Design and Technology in a fun and purposeful way. At the same time, it provides teachers with all the guidance they need to plan and deliver a high-quality Design and Technology education. The scheme of learning provides full coverage of the National Curriculum for Design and Technology. Each year group will complete three Design and Technology units over the course of the year. These will be taught each term in rotation with Art. Lessons will be taught weekly by the class teacher and will last one hour.

Planning/ Sequencing

Lessons are sequenced using the Reach2 scheme of work. The scheme provides a series of units to cover across the year including structures, mechanisms, cooking and nutrition, electrical systems and textiles. These units will not be covered in every year however; there are opportunities for children to build on prior knowledge and skills they have developed.

For example, throughout the school, structures will be taught in Year 1 in their Bridges unit, in Year 2 as part of the Terrific Towers topic, in Year 3 for You've Been Framed, in Year 5 for their Marble Runs and in Year 6 for Hats off to You. Within these units, children will work with different materials and develop different skills linked to the four strands of Design and Technology.

Four strands of Design and Technology

Throughout the school year, pupils are taught lessons to embed the four areas of Design and Technology : design, make, evaluate and technical knowledge.

Design:
- Pupils design innovative, functional and appealing products
- Pupils can communicate their ideas

Make:
- Pupils can select from and use a wide range of tools and materials

Evaluate:
- Pupils evaluate against a criteria and suggest ways to improve their work

Implementation – (continued)

Structure of a lesson

Design and Technology is taught weekly every second half term and lasts for one hour. Each lesson begins by revisiting knowledge from the previous lesson and the previous unit. The key vocabulary for the lesson is then taught allowing time for children to revisit previous vocabulary too. The new learning is then presented, followed by a modelled task and guided practice, before the children then independently apply the new learning.

Enrichment

Our 11B411 challenges help enrich our curriculum. In Year 4, for our Wildlife Warriors challenge, children make wooden birdboxes and insect houses. In Year 2, as part of our Seeds to Supper challenge, the children grow vegetables in our school garden to create a meal with.

DT in EYFS

In Reception, children DT through open-ended play, creativity, and purposeful experimentation. They are supported to try a wide range of joining techniques during junk modelling, using materials such as tape, string, and treasury tags to connect and build their creations. Open-ended resources encourage them to mix materials and solve problems imaginatively, with adults offering guidance to help bring their ideas to life.

Children engage with construction materials to stack, balance, and join pieces both vertically and horizontally, creating enclosures, defining spaces, and building spatial awareness through practical exploration. Both indoors and outdoors, children have access to small- and large-scale construction materials, enabling them to explore, create, and adapt their ideas in varied contexts.

10 min – next steps/review

5 min – Hook

15 min – Teaching input inc vocabulary

10 min – Guided practice

15 min – Independent application

5 min – Review of learning

Assessment

In each unit studied, teachers will use assessment for learning throughout the unit to ensure retrieval practice allows knowledge to move to the long-term memory. The daily and weekly reviews of learning will allow teachers to assess the children's key technical knowledge during a unit. The final practical outcome will also allow teachers an opportunity to assess the skills that have been taught. Pupils will then complete a multiple-choice quiz at the end of the unit which will assess their understanding of the key knowledge. The feedback from this will be fed back to teachers who can then address any gaps in future lessons.

SMSC + British Values

In Design and Technology, we aim to promote British Values and SMSC by:

- Encouraging pupils use of imagination and creativity in their learning
- Ensuring pupils having a sense of enjoyment and fascination in learning the way things work
- By looking at the achievements of key designers and creators, pupils develop an awareness of how they have influenced and shaped the country in which we live. This includes an appreciation of their work.
- We teach pupils to respect and value diversity through showing respect for different viewpoints and ideas as well as in the ability to work effectively together both individually and in groups.
- Enabling pupils to reflect on the ways that products and designs can affect society and the environment

Implementation – (continued)

Sustainability

Through our chosen curriculum, we would like children to develop an understanding of how certain products can have an impact on the local and wider environment. We encourage children to evaluate products based on their sustainability . Our cooking and nutrition units include questions that cover sustainability too. Sustainability also impacts our resourcing for our units. We try to recycle, upcycle or reuse where we can, and we take consideration to ensure we are limiting food waste.

Retrieval Practice

Through the progression design of our curriculum, pupils are given opportunities to encounter technical knowledge and develop skills repeatedly throughout their time at our school. When a unit is revisited, teachers will employ retrieval practice strategies to support children in transferring knowledge to the long-term memory.

Adaptive Teaching

In line with our teaching and learning framework, adaptive teaching is used to ensure all learners can apply their knowledge, make progress and apply their knowledge to independent application.

Adaptations in Design and Technology may include:

- Adapted resources
- Providing additional models/demonstrations
- Vocabulary prompts

Impact – how will we know we achieved our aims?

Children will demonstrate imagination when designing and making

Children will think critically about their products and evaluate to suggest improvements

Children show curiosity about the world around them and ask questions about how things work

Children will select appropriate tools and techniques for making a product

Children have a love of Design and Technology and can articulate their interests

Children can successfully use ICT software to assist designing and learning

Pupils can accurately use the language and vocabulary of Design and Technology

Curriculum Overview
2026 - 2027

	Autumn	Spring	Summer
Year 1	Super Smoothies (Cooking and Nutrition)	Bridges (Structures)	Under My Umbrella (Textiles)
Year 2	Terrific Towers (Structures)	Wonderful World of Wool (Textiles)	I'm In Love With My Car (Mechanisms)
Year 3	Ready to Pop (Mechanical Systems)	You've Been Framed (Structures)	Dynamic Drawbridges (Mechanical Systems)
Year 4	On A Roll (Cooking and Nutrition)	Quizzical Quilting (Textiles)	Create a Buzz (Electrical Systems)
Year 5	Marble Run (Structures)	Automata Animals (Mechanical Systems)	Great British Menu (Cooking and Nutrition)
Year 6	Take A Seat (Textiles)	Hats Off To You (Structures)	Desk Pet (Electrical Systems)