



How we teach *Design and Technology* at Austrey and Newton Regis CE Primary Schools

Becoming the person God made me to be: living,
learning, loving.

"I praise you because I am fearfully and wonderfully made" Psalm 139:14

TRUST



JUSTICE



FORGIVENESS



HOPE



DIGNITY



COMMUNITY



Autumn 2024

Curriculum Statement

At Austrey and Newton Regis CE Primary Schools we take pride in providing a knowledge-rich curriculum that is inclusive and equitable, celebrates diversity and is

relevant to our school: preparing children for the fullness of life in an ever-changing world.

Our Vision

Austrey and Newton Regis Church of England Schools are small schools at the heart of their rural communities. They have a living Christian foundation that follows the teaching and example of Jesus who reached out **in love** and drew in everyone, whatever their status or struggles, beliefs or views.

The biblical and theological ideas that have shaped our vision are as follows:
Created to be like God, we are all individual, different, and precious.

*As school families, we treat everyone with **dignity**, seeing each person as a vital stroke in the creation of the masterpiece which is our school community. We **love** and welcome everyone, supporting them in the ups and downs of life and giving them **hope** for a bright future in their **lives** and **learning**. We seek **justice** for all, embracing those who face challenges in their **lives** and **learning**. We act responsibly, treating everyone fairly but not necessarily the same. We work to ensure that everyone has what they need, and we act and speak up for those who don't. **Equity** underpins our commitment to enabling everyone to flourish as the person God made them to be. Therefore, living like Jesus, we think and act with generous and **forgiving** hearts in the strategic and day to day life of the school. **Trusting** in God and the teaching of the bible, we are building a culture of **trust** in which everyone can feel safe; confident that their spiritual, emotional, and academic needs will be met and that their **uniqueness** will contribute to the **unity** and **wholeness** of Austrey and Newton Regis Church of England Primary Schools.*

Curriculum design

Our curriculum is ambitious and is based on the national curriculum but we recognise that this is the minimum entitlement for our children. Each subject is taught as a discrete discipline. Whilst developing these, links were considered very carefully to build on knowledge and skills within each subject, across the school and across subjects. We also carefully considered diversity, environmental awareness and health education when designing our curriculum. For the National Curriculum Document, please [click here](#)

Our Learning Behaviours

Resilience

We keep going, even when things are challenging. We can remain open, flexible, and willing to adapt to change, staying positive and optimistic. We invite feedback and deal positively with praise, setbacks and criticism.

Independence

We are self-motivated and show a thirst for learning. We take and manage risks, showing responsibility, initiative, creativity and enterprise. We can organise ourselves and work out goals and priorities. We play a full role in the life of the school. We can present a persuasive case for action, proposing practical ways forward.

Reflection

We evaluate the good things about our work, and the areas for improvement, acting on the outcomes. We make changes to improve our learning and communicate our learning in relevant ways to different audiences. We try to influence others, negotiating and balancing diverse views.

Resourcefulness

We think creatively by generating and exploring relevant ideas and making connections. We find links and see relationships, trying different ways to tackle a problem. We ask 'how', 'why' and 'what if?' questions. We take informed and well-reasoned decisions recognising that others have different beliefs and attitudes.

Team Work

We work cooperatively and confidently with others and listen to and take account of their views. We take an active part in our own role, and reach agreed outcomes, adapting our behaviour to suit different situations. We show fairness and consideration towards others. We take responsible action to bring improvement for others as well as ourselves.

What is Design Technology?

Our KS1 definition

Design and technology is a school subject that explores designing and making products that solve problems, and then evaluating how successful the results are.

Our KS2 definition

Design and technology is a school subject that explores designing and making products that solve problems, and then evaluating how successful the results are. Design and Technology develops skills and knowledge in design, structures, mechanisms, electrical control and a range of materials, including food. It encourages creativity and encourages us to think about important issues

"Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation." DfE 2013

The national curriculum for DT aims to ensure that all pupils:

- ✓ Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and

to participate successfully in an increasingly technological world

- ✓ Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- ✓ Critique, evaluate and test their ideas and products and the work of others
- ✓ Understand and apply the principles of nutrition and learn how to cook

Intent

We encourage children to use their creativity and imagination to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. We aim to link work to other subjects such as mathematics, science, history, computing and art. The children are also given opportunities to reflect upon and evaluate past and present design technology, its uses and its effectiveness and are encouraged to become innovators and risk-takers.

Implementation

Design Technology is taught as a discrete subject discipline (alternating with Art) throughout the academic year. We have long term plans that run on a two-year rolling programme to accommodate our mixed aged classes and to ensure full coverage during each key stage. Our medium-term plans show clearly how each lesson links to our curriculum intent, Christian vision and values, our learning behaviours and British Values.



Long Term Plan for DT and Art

Cycle A

	Y1/2	Y3/4	Y5/6
Autumn 1	Art - Drawing and Sketching - Scale and size focus Animals Henri Rousseau (Artist)	Art- Drawing and Sketching Ocean animals - Texture focus Van Gogh (Artist)	DT - Complex Structures - African shelter
Autumn 2	DT - Bridges Isambard Kingdom Brunel (Engineer) Ole Christiansen (Designer)	DT - 3D Structures - Designing a <u>natural disaster</u> shelter	Art - Drawing and Sketching - Line and <u>form</u> focus - 3D sculpture - MODROK fossils
Spring 1	DT - Cooking - Healthy meals	Art - Sculpture - Clay - 'Beaker' Folk' Pattern focus	DT - Cooking - Bread - Healthy Diets - Market research Andy Warhol (Artist)

Spring 2	DT - Moving Vehicles - <u>Wheels, Axels and Chassis</u> Charles McIntosh	DT - Cooking - Savoury European food Michelangelo (Sculptor)	Art - Pastels and chalks - <u>Blending focus - Waterfalls</u>
Summer 1	Art - 3D Sculpture - Clay - Seascapes- Impressionism - Claude Monet (Artist)	Art - Painting and Collage - <u>Colour washes and tones - Perspective focus</u> Picasso (Artist)	Art - Painting - Flowers Georgia O' Keeffe (Artist) Charles Rennie McIntosh (Architect and Designer)
Summer 2	Art - Painting - Colour <u>mixing focus</u> - Local landscapes - <u>Outdoor painting</u>	DT - Mechanisms - Cams and gears - Design a new teeth cleaning system	DT - Pulley and levers - Design and make <u>a new</u> battle weapon Matisse (Artist)



Long Term Plan for DT and Art

Cycle B

	Y1/2	Y3/4	Y5/6
Autumn 1	Art - Mixed Media - Collage - Weather	DT - textiles - Design and make a <u>new hat</u> for a desert explorer Mary Quant (Designer)	DT - Electricity - Switches/ toggles and <u>Motor focus</u> - Motorised Vehicles Picasso - Guernica (Artist)
Autumn 2	DT - Levers - Designing a <u>new toy</u>	Art - Batik printing - <u>reverse and inverse</u> - animals and human skeletons	Art - Abstract Art - Mixed Media - <u>Rockets</u> Peter Thorpe (Artist)
Spring 1	DT - Structures - Large Scale- <u>Joining focus</u> Sir Christopher Wren (Architect)	DT - Cooking - Design and make <u>a healthy</u> dish for a stone age family	DT - Textiles - Slippers

Spring 2	Art - Drawing and Painting - Portraits - <u>Royal portraits Lucian Freud</u> (Artist)	DT - Electricity - Sound - design and <u>make a wire loop game</u>	Art - Painting - Watercolours - landscapes
Summer 1	DT - Textiles - Design and <u>make a patchwork minibeast blanket</u>	Art - Lino printing - Plants <u>focus</u> William Morris (Designer)	Art - Sculpture - Clay - Coil pots Kandinsky (Artist) Mondrian (Artist)
Summer 2	Art - Transient Art- outdoor - Natural Found Art Andy Goldsworthy (Artist)	Art - Acrylic Paints and Oil pastel - <u>blending focus</u> - Electrical <u>storms</u> Sou Fujimoto (Artist)	DT - Mechanisms - Fairground rides

Examples of links

- Year 3 and 4 design and make desert explorer hats in textiles at the same time as studying mapping skills in geography and desert habitats and food chains in Science.
- Year 5 and 6 study electricity, using switches, motors and toggles to make WW1 motorised vehicles at the same time as studying electricity in Science and WW1 and WW2 in history.
- Year 1 and 2 make bridges at the same time as studying Victorian scientists and inventors in Science.

Impact

Children do not complete entry and exit quizzes in this subject. At the end of each lesson, teachers assess against the questions in the medium-term plan. These assessment grids are available to all teachers so they can revisit the learning that is needed before beginning a new unit. In order to assess if the children are committing knowledge to long term memory, we use an 'interrupting the forgetting' strategy, which will include reinforcing links to previous learning both within and across the year groups. The impact of our fun, engaging and board Design Technology curriculum is our children will make progress and appreciate the values of design and creativity. Develop independence and enjoyment of the subject and have an understanding that you can have a thriving career in the subject!