

Curzon DT Curriculum January 2022

Curzon specific aims of DT- our intent

All children:

- express themselves creatively
- make decisions and justify them
- develop the courage to try new ideas out
- use a range of materials and consistently improve their skills and techniques.
- develop an understanding of the importance of design and technology in our world
- learn the importance of healthy food
- learn to take risks and work with a range of tools

How this links our school vision: all our pupils growing in wisdom, appreciation of health and in the courage to take safe risks and try new things.

Implementation at Curzon

Organisation and choice of units

Design and technology is a crucial part of school life and learning and we are dedicated to the teaching and delivery of a high quality Design and Technology curriculum through well planned and resourced projects and experiences.

Each class has half a term of cookery and half a term of Forest School each year. Food technology is implemented across the school with children developing an understanding of where food comes from, the importance of a varied and healthy diet and how to prepare food and cook safely. Forest school sessions focus on caring for the environment, working with natural materials and working with others. As children go through the school, they use a wider range of tools and are given the opportunity to take more (controlled) risks. Curzon has a qualified Forest School leader and qualified cookery leader.

DT projects have been chosen to link with humanities as this strengthens the learning and make it more memorable in both subject areas.

Blue=DT projects

	Autumn	Spring	Summer
KS1 Year A	UK Knowledge Great Fire of London	Florence Nightingale Weather	Neil Armstrong Continents
KS1 Year B	Local Area and Safety George Stephenson and vehicles	Nelson Mandela Kenya	Seaside Homes from the Past
	DT – focus on how cooking evolved within the different homes from the past: cooking over open fire, cooking range, gas/electric cookers, microwaves	DT/science – making an umbrella/mini shelter	
Year 3	Changes in Britain Stone Age to Iron Age Forest School – DT opportunities to explore SA technologies	Rainforests and woodlands (Penn Woods) DT – Rainforest diorama with moving parts	Ancient Egypt
Year 4	The Roman Empire and its Impact on Britain (& legacy) DT – Roman road	Mountains (UK/S America, Europe-relief maps and contours), Volcanoes, Earthquakes	Coast, water cycle, rivers, erosion. DT – create papier-mâché model of the journey of a river

Year 5	<p>Britain's settlement by Anglo-Saxons & Scots; Viking & Anglo-Saxon struggle for Kingdom of England (compare Anglo-Saxon crime and punishment to today)</p> <p>DT – Anglo-Saxon Museum of replica artefacts</p>	<p>Ancient Greece – life in Ancient Greece and legacy on British culture</p> <p>D&T link with Art Sculpture unit – creating a Greek pot in the style of Ancient Greek pottery</p>	<p>London -mapping, rivers, settlement, natural resources</p> <p>DT – Creating model of a bridge (based on bridges in London)</p>
Year 6	<p>Local Area Geography study & Local history study – link to Victorians through Disraeli/Hughenden</p>	<p>Fair trade (locational knowledge and economic activity) (Fair Trade fortnight is in Feb)</p> <p>DT – Create fair trade product and packaging</p>	<p>Early Islamic civilisation inc. Baghdad c.AD 900 - a non-European society that provides contrasts with British history</p> <p>DT - Cooking with spices, designing and creating a tagine</p>

DT projects also link with Science (e.g. making light up Christmas decorations in Y6 links with electricity).

Each year the whole school carries out a DT focused paper working project over a couple of days for World Book week. Younger children experiment with making different coloured paper. The older children create papyrus, recycle paper and make paper from rags. By allocating a substantial block of time to this project, we are able to give children the opportunity to evaluate, re-design their paper and have another go putting in their chosen improvements. Through this project, KS2 children understand how key events in design and technology of paper over time have helped shape the world.

Progression

Skills and knowledge for each year group are carefully mapped out to ensure progression throughout the school.

Within each unit, skills are built up in carefully sequenced lessons following the key areas of designing, making and evaluating.

Curzon Long Term Curriculum Planning for DT

EYFS DT is taught mainly through continuous provision covering the following key skills and following the same broad units at KS1:

Creating with Materials ELG- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form, and function; Share their creations, explaining the process they have used;

Our EYFS DT curriculum also provides rich opportunities for children to develop skills in other areas e.g. gross and fine motor skills; the natural world, people and communities; listening and attention; speaking; self-regulation - working with others and show awareness of their feelings; managing self (confidence, self-resilience and perseverance).

DT in KS1 is taught over a 2 year rolling programme. The units are carefully mapped out so that each year children have a wide range of experiences.

Ks1 YEAR A

Autumn	Spring	Summer	Skills KS1
	<p style="text-align: center;">Forest School Cookery</p> <p style="text-align: center;">Making paper</p> <p style="text-align: center;">Mini shelter (Science)</p>	<p style="text-align: center;">Playground (Art)</p>	<p>EYFS Develop own ideas and select appropriate materials to do so independently. Talk about what they are going to do and why. Return and review previous learning building up from initial ideas.</p> <p>YEAR 1 Developing, planning and communication ideas Draw on their own experience to help generate ideas Suggest ideas and explain what they are going to do</p>

			<p>Identify a target groups for what they intend to design and make</p> <p>Working with tools, equipment, materials and components to make quality products (including food) Make their design using appropriate techniques With help measure and shape a range of materials Use tools: scissors and a hole punch safely Select and use appropriate fruit and veg processes and tools Use basic food handling hygienic practices and personal hygiene</p> <p>Evaluating processes and products Evaluate their product by discussing how well it works in relation to the original purpose.</p> <p>YEAR 2 Developing, planning and communication ideas Generate ideas by drawing on their own and other people's experiences Develop their design ideas through discussion, observation, drawing and modelling Identify a purpose for what they intend to design and make Identify simple design criteria</p>
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			<p>Make simple drawings and label parts</p> <p>Working with tools, equipment, materials and components to make quality products (including food) Begin to select tools and materials; use vocab to name and describe them Measure and cut and with some accuracy Assembly, join and combine materials in order to make a product Follow safe procedures for food safety and hygiene</p> <p>Evaluating processes and products Evaluate their product by discussing how well it works in relation to the original purpose.</p>
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KS1 YEAR B

Autumn	Spring	Summer	Skills KS1
	<p>Forest School Cookery</p> <p>Making paper</p> <p>Umbrella (Science)</p>	Puppets (Art)	<p>EYFS Develop own ideas and select appropriate materials to do so independently. Talk about what they are going to do and why. Return and review previous learning building up from initial ideas.</p>

			<p>YEAR 1</p> <p>Developing, planning and communication ideas Draw on their own experience to help generate ideas Suggest ideas and explain what they are going to do Identify a target groups for what they intend to design and make</p> <p>Working with tools, equipment, materials and components to make quality products (including food) Make their design using appropriate techniques With help measure and shape a range of materials Use tools: scissors and a hole punch safely Select and use appropriate fruit and veg processes and tools Use basic food handling hygienic practices and personal hygiene</p> <p>Evaluating processes and products Evaluate their product by discussing how well it works in relation to the original purpose.</p> <p>YEAR 2</p> <p>Developing, planning and communication ideas</p>
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			<p>Generate ideas by drawing on their own and other people's experiences</p> <p>Develop their design ideas through discussion, observation, drawing and modelling</p> <p>Identify a purpose for what they intend to design and make</p> <p>Identify simple design criteria</p> <p>Make simple drawings and label parts</p> <p>Working with tools, equipment, materials and components to make quality products (including food)</p> <p>Begin to select tools and materials; use vocab to name and describe them</p> <p>Measure and cut and with some accuracy</p> <p>Assembly, join and combine materials in order to make a product</p> <p>Follow safe procedures for food safety and hygiene</p> <p>Evaluating processes and products</p> <p>Evaluate their product by discussing how well it works in relation to the original purpose.</p>
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YEAR 3

Autumn	Spring	Summer	Skills
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**Forest School
Cookery**

**Creating rainforest dioramas with
moving parts (Art and History)**

Purpose: create a diorama to teach a
KS1 child about the rainforest
-investigating flaps and levers
-investigating ways of making items 3D
and fixing them to the box

Making papyrus

Purpose: write a hieroglyphics message
on created papyrus
-investigating ways of joining strips
-investigating smoothing techniques

understand how key events and
individuals in design and technology
have helped shape the world

**Developing, planning and
communication ideas**

Generate ideas for an item, considering
its purpose and the user/s
Identify a purpose and establish criteria
for a successful product
Plan the order of their work before
starting
Explore, develop and communicate
design proposals by modelling ideas
Make drawings with labels when
designing

**Working with tools, equipment,
materials and components to make
quality products (including food)**

Select tools and techniques for making
their product
Measure, mark out, cut score and
assembly component with more
accuracy
Work safely and accurately with a range
of simple tools
Think about their ideas as they make
progress and be willing to change things
if this helps them improve their work
Demonstrate hygienic food preparation
and storage

Evaluating processes and products

			Evaluate their product against original design criteria – how well it meets its intended purpose
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YEAR 4

Autumn	Spring	Summer	Skills
<p>Forest School Cookery</p> <p>Roman roads (History)</p>	<p>Making recycled paper Purpose: create recycled paper that is usable</p> <ul style="list-style-type: none"> -investigating with different sizes of strips and types of paper -investigating with time for soaking the strips -investigating ways of drying the paper <p>understand how key events and individuals in design and technology have helped shape the world</p>	<p>Journey of a river model (Geography)</p>	<p>Developing, planning and communication ideas Generate ideas, considering the purposes for which they are designing Make labelled drawings from different views showing specific features Develop a clear idea of what has to be done, planning how to use materials, equipment and processes and suggesting alternative methods of making if the first attempts fail</p> <p>Working with tools, equipment, materials and components to make quality products (including food) Select appropriate tools and techniques for making their product Measure mark out, cut and shape a range of materials using appropriate tools, equipment and techniques</p>

			<p>Join and combine materials and components accurately</p> <p>Evaluating processes and products Evaluate their work both during and at the end of the assignment</p> <p>Evaluate their products carrying out appropriate tests</p>
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YEAR 5

Autumn	Spring	Summer	Skills
<p>Anglo Saxon artefacts and museum (History)</p>	<p>Paper making-Lindisfarne script understand how key events and individuals in design and technology have helped shape the world Purpose: create a replica of Lindisfarne script</p> <p>Greek vases (Art)</p>	<p>Forest school Cookery</p> <p>Making bridges (Geography) strengthen, stiffen and reinforce understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</p> <p>Designing using Sketch up (Computing)</p>	<p>Developing, planning and communication ideas Generate ideas through brainstorming and identify a purpose for their product Draw up a specification for their design Develop a clear idea of what has to be done, planning how to use materials, equipment and processes and suggestion alternative methods of making if the first attempts fail Use results of investigations and information sources when planning designs</p> <p>Working with tools, equipment, materials and components to make quality products (including food)</p>

			<p>Select appropriate materials, tools and techniques</p> <p>Measure and mark out accurately</p> <p>Use skills in using different tools and equipment safely and accurately</p> <p>Weigh and measure accurately</p> <p>Apply the rules for basic food hygiene and other safe practices</p> <p>Cut and join with accuracy to ensure a good quality finish to the product</p> <p>Evaluating processes and products</p> <p>Evaluate a product against the original design specification</p> <p>Evaluate it personally and seek evaluation from others</p>
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YEAR 6

Autumn	Spring	Summer	Skills
<p>Creating light up Christmas decorations (Science)</p> <p>understand and use electrical systems in their products</p>	<p>Printing</p> <p>understand how key events and individuals in design and technology have helped shape the world- Gutenberg press</p> <p>Purpose: create a printed message with uniform letters</p> <p>-choosing how to create printing blocks</p>	<p>Forest school</p> <p>Cookery</p> <p>Clay tagines (History)</p> <p>Designing Ancient Bagdad towns using ICT (History)</p>	<p>Developing, planning and communication ideas</p> <p>Communicate their ideas through detailed labelled drawings</p> <p>Develop a design specification</p> <p>Plan the order of their work choosing appropriate materials, tools and techniques</p>

	<p>-investigating how to create letters that are uniform in size -investigating how much in/type of ink to use</p> <p>Fair trade bars (Geography)</p>		<p>Working with tools, equipment, materials and components to make quality products (including food) Select appropriate tools, materials, components and techniques Use tools safely and accurately Construct products using permanent joining techniques Make modifications as they go along</p> <p>Evaluating processes and products Evaluate their products, identifying strengths and areas for development and carrying out appropriate tests Record their evaluations using drawings with labels Evaluate against their original criteria and suggest ways their product could be improved</p>
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Assessment

Assessment of children's learning in Design Technology is an ongoing monitoring of children's understanding, knowledge and skills by the class teacher throughout lessons. This assessment is then used to inform differentiation, support and challenge for each child. Summative assessment based on our skills overview is conducted termly by class teachers across each year group to inform the subject leader of standards. DT is also monitored by the subject leader throughout the year in the form of sketch book monitoring, looking at outcomes and holding pupil interviews to discuss their learning and understanding and establish the impact of the teaching taking place. The DT subject leader meets with the curriculum committee annually to discuss their actions.

Impact

The structure of the DT curriculum ensures that children are able to develop their skills and knowledge. Children learn to understand and apply the key principles of DT: designing, making and evaluating. Skills are built up progressively in each area so that by the end of KS2 our pupils are able to plan in detail choosing the order of work, materials, tools and techniques. They develop accuracy when working with materials and are able to evaluate their products against the specification and make improvements. DT is taught in a supportive and constructive way enabling our children to try out new skills, take controlled risks and grow in the Curzon value of courage.

Completed products are often shared with parents who are invited in to view completed projects. This helps our pupils develop a sense of pride. The DT curriculum at Curzon contributes to children's personal development in creativity, independence, judgement, risk taking and self-reflection.