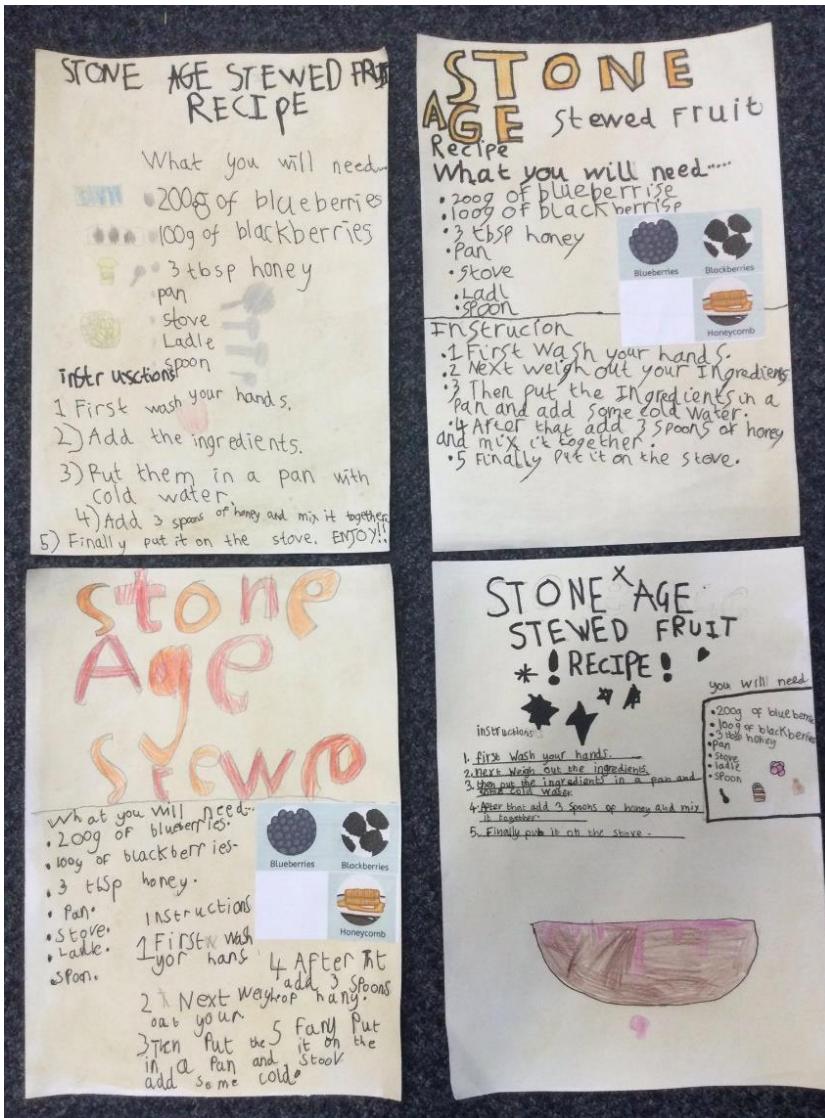


# Design Technology Curriculum



We care, we learn, we belong



# Curriculum Intent

- ▶ At MTVS we have designed our curriculum with the development of the **whole child** at the **centre**. Our aim is to provide our children with an **engaging, exciting** and **empowering** curriculum offering them opportunities to **grow as individuals** as well as **learners** and prepare them for life today and tomorrow.
- ▶ The intention of our curriculum is to ensure that children access a **broad range of enriching experiences**, so they **acquire valuable knowledge, skills, understanding** and **attitudes** to enable them to become **highly motivated** and **resilient** learners who feel they have a **voice**. Opportunities are planned to make use of our locality and the context of our school while maintaining coverage of the National Curriculum.

# D.T Curriculum Intent

- ▶ Technology is an important and ever-advancing part of life. Our aim at MTVS is to ensure that children keep up-to-date with advancing technology through an adaptive, skills-based curriculum.
- ▶ At MTVS, our D.T curriculum is based on providing children with the correct knowledge, skills and experiences to plan, make and evaluate projects that they are proud of. To use their creative individualism to produce prototypes and final designs which respond to a problem or build on a previous design.
- ▶ By the end of KS1, we want our children to have been taught a wide range of skills using many different materials and to develop their cutting, sticking and joining skills alongside their fine-motor development. It is important they develop their understanding of key vocabulary and apply this knowledge to their own work.
- ▶ Key Stage 2 builds on this firm foundation developing children's skills and knowledge further, refining skills and developing a confidence to annotate their designs and final creations in their creative book. Within Key Stage 2, our sketchbooks show the process of D.T from research, design, a final product and evaluating the effectiveness of our product against our design.
- ▶ At MTVS, our D.T curriculum is not outcome-based but skills-based and follows the 'Design, Make and Evaluate' process. Teachers adapt D.T units and outcomes to suit the cohort and to make links to the wider curriculum, school and community. For example, one year for cooking and nutrition, Year 3 children may make Stone Age stew. Another year, the same skills may be developed but linked to harvest or discussing how far food travels to get to our plates. This means our D.T curriculum is current, adaptable and progressive.

# D.T Curriculum Implementation

- ▶ Suggestions for D.T outcomes are shared with teachers on curriculum trackers to support the planning and teaching of D.T.
- ▶ Subject leader regularly audits resources to ensure high-quality materials are available for the teaching of D.T
- ▶ Quality-First teaching from staff and CPD opportunities through the National College
- ▶ Curriculum trackers are highlighted and children are identified as exceeding expectations, meeting expectations or not meeting expectations.

Mickle Trafford Village School Design & Technology Overview

Year Group	Textiles	Structures	Cooking and Nutrition	Mechanical Systems	Electrical systems
1		Construction Kits	Fruit Kebabs	Levers – storybook page	
2	Basic sewing skills		Soup	Moving vehicles	
3		Photo Frames	Healthy eating – savory recipe (science link)	Levers - shadow puppets (link to science – light)	<input type="checkbox"/>
4	Purses			Cam toys	Electrical board games (link to science – electricity)
5		Packaging/ Bridges		Pneumatics	
6			Bread making	Gears & Pulleys- Fairgrounds	Electrical Control -Fairgrounds

# How will we develop D.T in 2022/2023 at MTVS?

- ▶ Each teacher to adapt a D.T unit to create a product for our developing wildlife area, new for 2022/2023. For example, Year 3 will create photo frames to hold images of animals, insects and different species of plants and trees.
- ▶ In readiness for 2022/23, we have identified that some units of D.T, such as levers and linkages in Year 3, lend themselves to a more ‘trial and error’ / experimental approach with ongoing improvements and retrospective evaluation, rather than the traditional design, make, evaluate process.
- ▶ This academic year, our aim is to widen the experiences of our children through cross-curricular units, visits, visitors and quality resources and books. We aim to develop children’s passion for initiative and invention and to develop children’s wider understanding of D.T-based roles in the wider world to promote future employment. Together, the D.T subject lead, D.T governor and teaching staff will plan and deliver a design technology-based careers week for Year 6 children.



# D.T at a glance

## Mickle Trafford Village School Design & Technology Overview

Year Group	Textiles	Structures	Cooking and Nutrition	Mechanical Systems	Electrical systems
1		Construction Kits	Fruit Kebabs	Levers – storybook page	
2	Basic sewing skills		Soup	Moving vehicles	
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5		Packaging/ Bridges		Pneumatics	
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# D.T in EYFS

	Autumn	Spring	Summer
Enquiry Question/ Key Concept	Cooking- Bread & Vegetables soup	Design/ Function- Bird feeders & Minibeast homes	Function- Boats Design- Supertato
Intended knowledge and Skills	<p>Understand how to safely chop vegetables Observe and discuss the changes of chopped vegetables to soup/ dough to bread Know how to create vegetables soup including naming ingredients and following a simple recipe Follow a simple recipe to bake bread Use gross motor skills to mix and knead dough Experiment with different textures including wrapping junk modelling (linked to Christmas)</p>	<p>Explore and understand how to join a range of materials including glue, stapler, tape, twisting (pipe cleaners) and string Understand the function of a bird feeder/ minibeast home Discuss and share ideas of what makes a good bird feeder/ minibeast home Explore a range of materials that could be used discussing what works well, considering properties</p>	<p>Design a supertato by drawing first, considering what materials I will need Continue to explore how to join materials including glue, stapler, tape and string Understand how to use scissors carefully and appropriately to cut materials Explore a range of materials (junk modelling) and consider what properties would work well to create a boat</p>
Development Matters Link	<p>Know and talk about the different factors that support their overall health and wellbeing including personal hygiene and healthy eating</p> <p>Develop their small motor skills so that they can use a range of tools competently, safely and confidently.</p>	<p>Join different materials and explore different textures. Create collaboratively, sharing ideas, resources and skills.</p>	<p>Join different materials and explore different textures.</p> <p>Explore different materials freely, to develop their ideas about how to use them and what to make</p> <p>Return to and build on their previous learning, refining ideas and developing their ability to represent them.</p>
Future learning	<b>Year 1</b> -Pupils focus on healthy eating, where food comes from and the importance of hygiene when handling food. Pupils will continue to develop their cutting skills	<b>Year 1</b> -Pupils will continue to carefully choose tools and materials for their creations including how to make their models stronger	<b>Year 1</b> - Pupils will continue to develop their design ideas through collaboration and careful planning. Pupils will continue to develop cutting skills through cutting a range of materials. Pupils will begin to describe why something works
Key Vocabulary	Ingredients, recipe, heat, bake, dough, knead, rise	Join, materials	Waterproof, float, design, <b>join, materials</b>

# D.T in Years 1-6



Mickle Trafford Village School

## D.T. Assessment Focus for Progression of Skills

	Fs2	Y1	Y2	Y3	Y4	Y5	Y6
<b>Design at KS1</b> <ul style="list-style-type: none"> <li>design purposeful, functional, appealing products for themselves and other users based on design criteria</li> <li>generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</li> </ul> <b>Design at KS2</b> <ul style="list-style-type: none"> <li>use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups</li> <li>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</li> </ul>		<p>Can I think of some ideas of my own?</p> <p><u>Construction</u></p> <p>Can I talk with others about how I want to construct my model?</p>	<p>Can I think of design ideas for myself?</p> <p>Can I choose the best tools, materials and components?</p> <p>Can I explain why these are the best materials/ components to use?</p> <p>Can I describe my design by using pictures, diagrams, models and words?</p> <p>Can I make sensible choices about which materials to use for my construction?</p> <p>Can I develop my own ideas from an initial starting point?</p>	<p>Can I investigate and evaluate existing products to support my own designing?</p> <p>Can I design a product to meet a range of given requirements?</p> <p>Can I describe my design using an accurately labelled sketch and words?</p> <p>Can I put together a step-by-step plan which shows the order of working and choose what equipment and tools I need?</p> <p><b>BV – expressing preferences and comparing ideas. Respect for different viewpoints.</b> <b>CC – evaluating plans – willing to make improvements</b></p>	<p>Can I investigate, disassemble and evaluate existing products to support my own designing?</p> <p>Can I consider the ideas of others when designing and create a design to meet specific requirements (design brief)?</p> <p>Can I come up with at least one idea about how to create my product?</p> <p>Can I produce a plan and explain it to others?</p>	<p>Can I investigate, disassemble and evaluate existing products to support my product designs?</p> <p>Can I carry out research to support the development of my design ideas?</p> <p>Can I consider the needs or opinions of others in designing a new product?</p> <p>Can I generate a list of criteria to consider in my design?</p> <p>Can I suggest some alternative plans and say what the good points and drawbacks are about each?</p> <p>Can I use labelled drawings/ exploded diagrams to explain my final design idea?</p> <p>Can I produce a detailed step-by-step plan (or recipe)?</p> <p>Can I explain how I will make sure my final product is good quality?</p> <p><b>CC - Making amendments to original designs/ resilience to persevere with a problem/ choosing the best idea to fit the needs of the user</b></p>	<p>Can I carry out research and investigate existing products to inform my design criteria?</p> <p>Can I consider the needs or opinions of others in designing a new product?</p> <p>Can I generate a list of criteria to consider in my design?</p> <p>Can I suggest some alternative plans and say what the good points and drawbacks are about each?</p> <p>Can I use labelled drawings/ exploded diagrams to explain my final design idea?</p> <p>Can I produce a detailed step-by-step plan (or recipe)?</p> <p>Can I explain how I will make sure my final product is good quality?</p> <p><b>CC - Making amendments to original designs/ resilience to persevere with a problem/ choosing the best idea to fit the needs of the user</b></p>

Follow the link to see the complete progression of skills in D.T at MTVS:  
[http://www.mickletraffordvillageschool.co.uk/serve\\_file/8547221](http://www.mickletraffordvillageschool.co.uk/serve_file/8547221)