'Learning for a fuller life...'

TAVERHAM VC CE JUNIOR SCHOOL CURRICULUM OVERVIEW		***Design and Technology***
INTENT		
For pupils to have the opportunity to engage in stimulating, inspiring and practical lessons. Children are given opportunities to think creatively, produce designs of their own and make products that solve real and relevant problems. Pupils will acquire a broad range of knowledge and use skills from across the curriculum. They will develop new specific skills and expertise to enable them to perform practical tasks with confidence. Children will be shown how to evaluate and improve their ideas and products. Within food technology, children will learn about good nutrition and healthy eating, and apply this knowledge in practical cooking tasks.		
YEAR 3	SKILLS	KNOWLEDGE
	Pupils will learn to: • Make a bookmark using a variety of embroidery stitches (Stone Age) • Make a blueberry muffin (with box) by following a recipe and instructions (Canada) • Prepare and cook a vegetable soup, developing cutting and peeling skills. (World War 2) • Make a shaduf using measuring and cutting skills to form a structure (Ancient Egypt) • Create a sustainable town, considering the needs of a town and balancing them with the environment. • Use research and develop criteria to inform the design products that are fit for purpose • Generate and develop, model and communicate ideas through discussion and sketches • Evaluate their ideas against their own design	*Pupils will learn about:* • Different types of textiles and how they have different functional properties • Key events and individual people who have created products that have shaped the world • The concept of structures and how these have developed over time • The principles of a healthy diet • Seasonality and how a variety of products are reared and processed (Royal Norfolk Show)
Enrichment: Norfolk show visit to learn about local produce and where food comes from		*Vocabulary:* Sew, stitch, join, design, evaluate, utensils, ingredients, texture, taste, healthy, spread, cut

<table>
<tr><td>YEAR 4</td><td>Pupils will learn to:
Use design and scientific skills to make an electric quiz board
Make a vegetarian recipe
Make a moving quiz board
Reuse a plastic bottle for another purpose
Use research and develop criteria to inform the design products that are fit for purpose
Generate and develop, model and communicate ideas through discussion and annotated sketches
Evaluate their ideas and products against criteria and consider the views of others when improving their work
Prepare and cook a vegetarian meal using chopping, slicing, mixing.</td><td>Pupils will learn about:
Mechanical (levers) systems when making a when making a moving animal board
Electrical systems when making a quiz board
Key events and individual people who have created products that have shaped the world
The principles of a healthy diet.
Understand that the seasons can affect food produce</td></tr>
<tr><td colspan="2">Enrichment:</td><td>Vocabulary:
Lever, circuit, research, appealing, reduce, reuse, recycle, eco-friendly, design, evaluate, techniques, ingredients</td></tr>
<tr><td>YEAR 5</td><td>Pupils will learn to:
Follow instructions to make a Viking Longboat
Design their own working Space Buggy
Research and grow their own vegetables
Research healthy meals and plan a meal for an astronaut – making healthy space smoothie.
Design, build and program a carousel using a crumble kit.
Use research and develop criteria to inform the design products that are fit for purpose
Generate and develop, model and communicate ideas through discussion, annotated sketches and exploded diagrams
Evaluate their ideas and products against criteria and consider the views of others when improving their work
Prepare and cook bread using mixing, spreading, kneading and baking.</td><td>Pupils will learn about:
Mechanical (pulleys) and electrical systems when making a Space Buggy
Computer programming to control a product
How to stiffen and reinforce more complex structures
A variety of tools and how they can be used to perform practical tasks
Key events and individual people who have created products that have shaped the world
The principles of a healthy diet
Seasonality and how a variety of products are grown and processed</td></tr>
<tr><td colspan="2">Enrichment:
Using the garden to grow own fruit and vegetables</td><td>Vocabulary:
Pulley, gear, driver, rotation, motor, belt, spindle, circuit, switch, reinforced, stability, design, evaluate, ingredients, nutrition, healthy, varied, source, seasonality</td></tr>
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YEAR 6	*Pupils will learn to:* • Design and make their own working Cam Toy • Use online design software • Use research and develop criteria to inform the design products that are fit for purpose • Generate and develop, model and communicate ideas through discussion, annotated sketches, exploded diagrams and computer aided design • Evaluate their ideas and products against criteria and consider the views of others when improving their work • Prepare and cook Mexican street food using peeling, chopping, slicing, grating, mixing and spreading	*Pupils will learn about:* • Mechanical systems (cams) when making a Cam Toy • How to stiffen and reinforce more complex structures • A variety of tools and how they can be used to perform practical tasks • Key events and individual people who have created products that have shaped the world • The principles of a healthy diet • That different food and drink contain different substances – nutrients, water and fibre.
Enrichment:		*Vocabulary:* Cams, tools, annotate, design, evaluate, innovative, functionality, reinforced, prototype, spice, herbs, savoury, seasonality, nutrition, healthy, varied

Support for SEN/disadvantaged children:	***Additional opportunities for more-able children:***
• A variety of methods of recording ideas to be provided • Adult support when necessary whilst encouraging independence • Key words sheets, flow charts and visual instruction sheets which explain a process in a step-by-step manner.	• Opportunities to explore ideas and discover own prototypes beyond class ideas. • Encourage own thinking and independence in all areas. • Additional opportunities to research and come up with own ideas

How does Design and Technology contribute to the overall school aims? (*Children who are: Successful and Happy; Confident and Resilient; Responsible; Caring; Respectful and Tolerant and Reflective)*:

Studying Design and Technology includes the use of a broad range of knowledge, skills, and understanding, and prompts engagement in a wide variety of activities. Pupils design and make products that solve real and relevant problems within a variety of contexts. Through evaluation of past and present Design and Technology, they develop a critical understanding of its impact on daily life and the wider world. All children can experience success in DT by designing and making their own finished products.
DT allows itself perfectly for building resilience, with children having to adapt and change ideas throughout the design and make process. Furthermore, children are taught to act responsibly when using equipment safely within lessons. Many DT lessons and activities involve children to work with partners or in small groups; these times require children to show a respectful and caring approach to others and to be tolerant of other people's opinions.

How does Design and Technology contribute to the Spiritual Development of children?

Design and Technology at TJS enables children to develop creativity, problem-solving, and self-expression. Through designing and making, children explore the world around them, engaging their imagination and sense of wonder. The process encourages them to reflect on their values, such as sustainability and empathy, especially when considering how their creations affect others and the environment. Collaborative work in D&T also promotes a sense of community and shared purpose, allowing children to connect with others and appreciate different perspectives, which nurtures their emotional and spiritual growth.