



The Design and Technology Curriculum

at Ashfield Valley Primary School

There is a clear vision for the Teaching and Learning of Design and Technology

Every child is an interdependent designer and creator. Pupils are able to explore and investigate, design, make and evaluate processes. The teaching and learning of Design and Technology will enable our children to become resilient risk takers. We will build engineers who can confidently apply their knowledge and use their skills to problem solve. Children will feel confident to select and use a range of materials, building and applying their knowledge and understanding of skills to create functional, practical products with a desire to succeed in a technological world, embedding skills for life, preparing them for their next stage in education, employment and a future of possibilities.

Every child is an interdependent designer and creator. Pupils are able to explore and investigate, design, make and evaluate processes.

The beginning of our vision statement echoes the importance of children having the opportunity to explore processes in order to become independent designers, creators and risk takers. Our aim is to ensure that every child flourishes into resilient risk takers where they will feel confident to use and apply their knowledge and understanding of design and technology skills to ensure that they can succeed in a technological world. Furthermore, preparing them for their next stage in education and a future of possibilities.

There is a clear vision for the Teaching and Learning of Design and Technology

'Every Child a Designer and Creator' is at the heart of the Design and Technology vision statement, ensuring that this is our priority for this subject area.

We follow the National Curriculum expectations in design and technology, at every stage, to ensure all pupils in our school can access the full wider curriculum and have strong foundations for future learning.

We aim to provide a rigorous and sequential design and technology curriculum, which develops all pupils' fluency, confidence and enjoyment surrounding this area.

Our Curriculum is progressive and builds upon prior knowledge at every stage.

How do these concepts progress throughout the school?

EYFS	KS1	KS2
<ul style="list-style-type: none"> • Children to develop creativity and imagination when creating complex 'own worlds' using experiences and stories to help encourage design ideas. (1, 2, 3) • Children will begin to develop fine motor skills to explore and use a range of different materials. (3, 7) • Children will begin to share their creations, explaining the process they have used. (2,4) 	<ul style="list-style-type: none"> • Children's designs will include more technical aspects, where they will choose the appropriate materials to create effective joins for a range of products. (1, 2, 3) • A broader range of stimulus including designers and existing products are used to help influence the design ideas, process and help children reflect on their own ideas. (1, 2, 4) 	<ul style="list-style-type: none"> • Children are given the opportunity for the full design cycle to be more independent, and also to develop more technical skills that would be necessary to have when creating a certain type of product and fulfil a design purpose / brief. (1, 2, 3) • Children will evaluate their work continuously throughout the whole process and be expected to make adaptations if designs are not effective. They will understand that sometimes initial designs change and consider how they would improve a product if their designed / made again. (1, 2, 4)
<p>Each year, children will build on knowledge and embed further skills surrounding food hygiene. They will grow throughout school, promoting a love for cooking. (5)</p>		

Our Curriculum is progressive and builds upon prior knowledge at every stage.



Design & Technology Curriculum Overview

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery	Sewing stockings (Textiles)		Baking and fruit (Cooking and nutrition)		Making homes (Structures)	
Reception	Making pumpkin soup (Cooking and nutrition)		Making a castle (Structures)		Making a boat (structures)	
Year 1	Moving pictures of parts of the body. (Sliding mechanisms)		Structures: Whose Home? (Structures)		Super salads (Cooking and nutrition)	
Year 2	St. Paul's Cathedral (Great Fire of London). (Structures- Freestanding structures)		Fantastic fruit (Cooking and nutrition)		Puppets of local heroes (textiles).	
Year 3	Banish broken biscuits. Box them brilliantly. (Structures-Shell structures)		Designing a Bronze Age axe holder. (Textiles)		Dips and dippers from Egypt (Cooking and nutrition)	
Year 4	Creating a Roman Aqueduct (Structures)		Night lights (Electrical Systems- Simple circuits and switches)		Viking sandwich snacks (Cooking and nutrition)	
Year 5	Working with wheels and axles (Mechanical Systems cams)		Soups celebrating culture (Cooking and nutrition)		Designer bags (trade) (Textiles-Using computer-aided design (CAD) in textiles)	
Year 6	Bird hides for Amazon birds (Structures- Frame structures)		Alarming vehicles (Electrical Systems)		Summer smoothies (Cooking and nutrition).	

The Subject Leader knows about the teaching of the Design and Technology curriculum across the school

We are continually updating and reviewing our wider curriculum progression of skills. We have focused on the knowledge, understanding and skills needed to embed our design and technology teaching and learning consistently across school.

We use a range of external agencies and sources to assist with our design and technology curriculum. The *DT association* scheme of work is a fantastic scheme that enables us to conduct purposeful investigations.

Staff have taken part in CPD from external agencies surrounding Design and Technology skills and therefore feel confident when teaching new skills and concepts.



Subject Specialism – Design and Technology is valued within our wider curriculum

Children's Design and technology achievements are celebrated around school. We showcase pictures of the final products that our children produce in Design and Technology lessons and keep this updated throughout the year.

Design and Technology is taught consistently from EYFS- KS2.

How do these concepts progress throughout the school?

EYFS	KS1	KS2
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Each year, children will build on knowledge and embed further in school, promoting a love for cooking. (5)

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	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery	Sewing stockings (Textiles)		Baking and fruit (Cooking and nutrition)		Making homes (Structures)	
Reception	Making pumpkin soup (Cooking and nutrition)	Making a cattle (Structures)			TEXTILES	
Year 1	Moving pictures of parts of the body (Sliding mechanisms)	Structures: Whose Home?	Structures: Whose Home?		Super salads (Cooking and nutrition)	
Year 2	St. Paul's Cathedral (Great Fire of London). (Structures- Freestanding structures)	Fantastic fruit (Cooking and nutrition)			Puppets of local heroes (Textiles).	
Year 3	Banish broken biscuits. Box them brilliantly. (Structures-Shell structures)	Designing a Bronze Age axe holder. (Textiles)			Dips and dippers from Egypt (Cooking and nutrition)	
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We ensure the key elements of Design and Technology are a main focus and that our sequence of learning is purposeful.

Purpose of Night Lights!

Why do we have night lights?

Are there different night lights for different people? Why?

Can you think of any designs for night lights?

Evaluating Night Lights!



Do you like the design of this night light? Why or why not?

Who do you think this night light might be used for?

What would you change about this night light? Why?

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.

Designing My Night Light!

My design:



Evaluating My Night Light!

What do you like about your night light? Why?

What would you change about your night light? Why?

Who was your night light intended for?

We ensure that the teaching and learning of D&T follow the Purpose, Design, make and Evaluate process consistently across school.

When designing and making, pupils should be taught to select from and use a wider range of materials and component, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.

National Curriculum

We have the relevant resources to promote successful teaching and learning outcomes.



When making, children should select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] and select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.

National Curriculum.

Wheels, axles, components, glue guns, chopping boards, knives, a range of fabrics and materials.



Pupil Voice

What is Design and
Technology and why is
it important?



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