

Stow Heath Primary School



DT Curriculum – EYFS

<p>Early Years Curriculum Pupils should be taught about:</p> <ul style="list-style-type: none"> - Design and Technology through the expressive arts and design. 	
<p>Nursery Coverage</p> <p>In Nursery, pupils will follow these themes. However, themes may change as a result of following the children’s interests.</p> <p>Autumn Term- Once Upon a Rhyme! (Nursery rhymes/ actions)</p> <p>Spring Term- I wonder what grows? (Spring 1- Plants, Spring 2- Animals)</p> <p>Summer Term- Culture and community</p>	<p>Reception Coverage</p> <p>In Reception, pupils will follow these themes. However, themes may change as a result of following the children’s interests.</p> <p>Autumn Term- I wonder what makes a story? Autumn 2- Festivals and celebrations</p> <p>Spring Term- I wonder what makes a hero? (Real life heroes) I wonder what makes a hero (Superhero focus)</p> <p>Summer Term- I wonder what’s out there? (Space and Africa)</p>
<p>Nursery End points</p> <ul style="list-style-type: none"> - Explore different materials freely, to develop their ideas about how to use them - Make imaginative and complex ‘small worlds’ with blocks and construction kits, such as a city with different buildings and a park - Join different materials and explore different textures. - Develop their own ideas and then decide which materials to use to express them 	<p>Reception End points</p> <ul style="list-style-type: none"> - 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;

DT Curriculum - Key Stage 1

<p>National Curriculum: Pupils should be taught about:</p> <p>Design</p> <ul style="list-style-type: none"> ▪ design purposeful, functional, appealing products for themselves and other users based on design criteria ▪ generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology <p>Make</p> <ul style="list-style-type: none"> ▪ select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] ▪ select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics <p>Evaluate</p> <ul style="list-style-type: none"> ▪ explore and evaluate a range of existing products
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<ul style="list-style-type: none"> evaluate their ideas and products against design criteria <p>Technical knowledge</p> <ul style="list-style-type: none"> build structures, exploring how they can be made stronger, stiffer and more stable explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. <p>Cooking and Nutrition</p> <p>Key stage 1</p> <ul style="list-style-type: none"> use the basic principles of a healthy and varied diet to prepare dishes understand where food comes from. 			
<p>Year 1 Coverage</p> <p>Autumn Term – ‘Houses and Homes’ construction using small and large scale construction materials to design a home for the 3 little pigs. Spring Term – Make a 2D vehicle - using cutting, joining and finishing techniques/ lever and slider mechanisms to make a moving emergency vehicle. Summer Term – Make a puppet – Textiles/ sewing skills</p>		<p>Year 2 Coverage</p> <p>Autumn Term – Castles 3D construction – using cutting, joining and attaching techniques to make a 3D castle. Spring Term – Construct a moon buggy - wheels and axels. Summer Term –To design and make a healthy sandwich for ‘The lighthouse keepers’ lunch’ – Cooking and Nutrition</p>	
<p>Year 1 End points</p> <p>Autumn Term To know how to use small and large scale construction materials to create a simple structure To communicate our ideas through discussion To know how to follow a simple design To evaluate my own work saying what I like and dislike</p> <p>Spring Term To know the different parts of a vehicle To experiment with different cutting and joining techniques To design a 2D emergency vehicle To construct a 2D emergency vehicle using different joining techniques To evaluate a product based on likes and dislikes</p> <p>Summer term I know about different types of puppets and their uses I know how use running stitch to join fabric I know how to design a product for myself and other users I know how to use a range of simple cutting and joining techniques I know how to evaluate my product, stating what I like, dislike or would improve/ change</p>		<p>Year 2 End points</p> <p>Autumn Term: To know how to use a range of cutting, joining and attachment techniques (flange, L Brace, tab, tie.) To draw inspiration from a range of existing products To select materials for a purpose To use tools safely To work collaboratively to create a design that has clear steps to be followed To evaluate the work of others, offering improvement advice</p> <p>Spring Term I can explore and evaluate a range of existing products I can investigate making and testing axles I can design a moving vehicle with an axle I can make a moving vehicle with an axle I can evaluate my product stating what I like, dislike and what I would change</p> <p>Summer Term I know and understand where different food comes from I can investigate and evaluate existing healthy products I know how to use cooking equipment correctly and safely I can design a healthy sandwich based on a design criterion I can make a healthy sandwich I can evaluate my product, considering what I like, dislike and what I’d change</p>	

DT Curriculum –Key Stage 2

National Curriculum:

Pupils should be taught about:

Design

- 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
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

Make

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

Evaluate

- investigate and analyse a range of existing products
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- understand how key events and individuals in design and technology have helped shape the world

Technical knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- apply their understanding of computing to program, monitor and control their products.

Cooking and Nutrition

Key stage 2

- understand and apply the principles of a healthy and varied diet
- prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
- understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

Year 3 Coverage

Autumn Term –Marionette Puppets - making and technical knowledge
Spring Term – Making a large scale structure of an early home – technical knowledge to stiffen, strengthen and reinforce complex structures
Summer Term –Making a healthy pizza – Cooking and Nutrition

Year 4 Coverage

Autumn Term –Making a motorized boat – motorised mechanism
Spring Term – No DT this term
Summer Term –Making a historic building - pulley system

Year 3 End points

Autumn Term

I can explore and evaluate a range of existing products.
I can use a prototype and mock up to help practise cutting, assembling, and joining skills.
I can gather information about the needs and wants of individuals and groups and use this to inform my design
I can assemble, join and combine materials to create a product
I can use a range of tools and materials to create an aesthetically pleasing product
I can evaluate my product, drawing upon the views of the intended audience

Spring Term

I know how to use large scale construction materials to create a structure.
I know about early homes in the Stone/ Bronze and Iron Age.
I can design a large scale structure of an early home.
I know how to follow a design.
I can evaluate a product against its design criteria.

Summer Term

I know about national dishes of different countries
I know where and how a variety of ingredients are grown, reared, caught and processed.
I can investigate and analyse existing food products
I can design a healthy pizza using computer-aided design
I can prepare and make a healthy pizza
I can evaluate my own and peers' work.

Year 4 End points

Autumn Term

I can generate, develop and communicate ideas through designing my idea
I can use annotated sketches and exploded diagrams to communicate my design ideas.
I can understand and use electrical systems to create a motor mechanism.
I can test my products. and evaluate their performance.
I can evaluate my own products against a design criteria.

Spring Term

No DT this term

Summer Term

I can investigate pulley systems
I can create a prototype to explore design ideas.
I can research London landmarks.
I can design a London landmark with a pulley system.
I can create a London landmark with a pulley system.
I can evaluate my own and peers products against a design criteria.

Year 5 Coverage	Year 6 Coverage
<p>Autumn Term –Make a fabric Christmas decoration - Sewing Spring Term – Design a toy - CAM mechanism. Summer Term – Make a jungle inspired pop up book - moving mechanisms (Levers and linkages)</p>	<p>Autumn Term –Prepare and cook WW2 dishes. – cooking and Nutrition Spring Term- Make an LED night light – use knowledge of computing to programme, monitor and control products Summer Term – Enterprise- Design and create a product to sell – apply previously learnt knowledge.</p>
Year 5 End points	Year 6 End points
<p><u>Autumn Term</u> I can evaluate a range of existing products. I can successfully use running, over stitch and back stitch to join fabrics. I can gather information from an intended audience and use this to design a product. I can create a product against a design criteria I can evaluate my product against a design criteria.</p> <p><u>Spring Term</u> I know how CAM mechanisms work. I can design a toy with a CAM mechanism. I can make a product with a cam mechanism. I can evaluate my own and my peers’ products against a design criteria.</p> <p><u>Summer Term</u> I can investigate a range of existing products. I can investigate a range of techniques to create a moving mechanism I can design a simple pop-up book I can make a pop-up book using a range of moving mechanisms I can test a product on it’s intended audience to inform an evaluation To evaluate my product and the products of others against it’s design brief</p>	<p><u>Autumn Term</u> I know about the seasonality and farming in England I can plan sweet and savoury dishes based on Winter seasonality I can evaluate a product against a design criteria</p> <p><u>Spring Term</u> I can evaluate a range of existing products I know how to programme, monitor and control an LED light using Crumble software I can design a night light I can make a night light I can evaluate my own and peers work against a design criteria</p> <p><u>Summer Term</u> I can work collaboratively with others. I can communicate my ideas to design a product. I can use my previous learning (making/ technical knowledge/ cooking) to design and create a product for an intended audience. I can test my design ideas on my intended audience and then make the necessary adaptations to improve a product. I can use my literacy skills and knowledge of persuasive writing to create an advertisement. I can use my know of money and mathematical skills to calculates costings and profits. I can evaluate a process from start to finish.</p>