

DT Long Term Skills Plan 2022 -2023

The All Saints' DT planning outlines the skills that children should acquire each term. This allows class teachers to apply the skills listed for each term to a project that links to another part of the curriculum, whether it's topic, mathematics, science, ICT or even literacy. It's important that the design element is apparent so as to distinguish DT from art; children should design and make a product for somebody, for a particular purpose.

For the termly project we use the three worksheets which ensure that the **Design, Make, Evaluate** process is adhered to. The All Saints' Design and Technology Log Book is used by teachers for each project to evidence progression of DT skills across the school.

The summer term skills are all cookery based and all children will have the chance to learn these skills in DT as part of Healthy Living Week in June.

We encourage an awareness of our use of materials and as the children get older they should consider whether materials are recycled or can be recycled.

Class	Autumn 1	Spring	Summer 1			
Nursery	 Design Explore different materials freely, in order to develop their ideas about how to use them and what to make. Develop their own ideas and then decide which materials to use to express them. Explore how things work. 					
	Make Make imaginative and complex 'small worlds' with blocks and construction kits Join different materials and explore different textures.	Make With support, children should use a range of tools including scissors, hole punch, stapler, glue spreader, rolling pin, cutter and grater.	 Make Talk about the differences between materials and changes they notice. With support, children should practise stirring, mixing, pouring and blending some ingredients during cooking activities. 			
	 Discussion With support, children should be given: Opportunities to notice and discuss materials around them e.g. utensils for cooking, tree barks on a wall, soft furnishings in the classroom. Opportunities to discuss reasons that make activities safe or unsafe e.g. hygiene and electrical awareness. Opportunities to discuss appropriate use of senses e.g when tasting different foods. Opportunities to use the language of designing and making e.g. words such as 'join', 'build' and 'shape' as well as evaluative and comparative 					



	language 'longer', 'shorter', 'lighter' and 'heavier' and 'stronger'.					
	Autumn	Spring	Summer			
Reception	 Design Learn about planning and adapting initial ideas to make them better, e.g. a child might choose to use scissors, a stapler, elastic bands and glue to join bits together to make a toy vehicle but they might modify their initial idea by using masking tape. Learn about how everyday objects work by dismantling things and looking closely at their component parts, e.g. a child might dismantle a wind mill to discover how it is put together. 					
	Make					
	 Learn to construct with a purpose in mind, e.g. using scissors, glue string and a hole-punch to make a bag to store items collected Observe closely and replicate a structure, e.g. following a visit, children make a building they've seen out of small wooden bricks. 	Children should use a range of tools including scissors, hole punch, stapler, glue spreader, rolling pin, cutter and grater.	 Begin to understand some of the tools, techniques and processes involved in food preparation. E.g. taking turns stirring the mixture for the cake and then watching it rise while cooking. Children should practise stirring, mixing, pouring and blending some ingredients during cooking activities. 			
	 Discussion Opportunities to notice and discuss materials around them e.g. utensils for cooking, tree barks on a wall, soft furnishing in the classroom. Opportunities to discuss reasons that make activities safe or unsafe e.g. hygiene and electrical awareness. Opportunities to discuss appropriate use of senses e.g when tasting different foods. Opportunities to use the language of designing and making e.g. words such as 'join', 'build' and 'shape' as well as evaluative and comparative language 'longer', 'shorter', 'lighter' and 'heavier' and 'stronger'. Children should also learn to record their experiences by, for example, drawing, writing, voice recording or modelling. Autumn Spring Summer					
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Year 1	Design State					
	Have own ideas Explain what I want to do					
	Explain what I want to do Explain what my product is for, and how it will work					
	Use pictures and words to plan, begin to use models					
	research similar existing products					



	 With help measure, mark out, cut and shape a range of materials Use tools e.g. scissors 	Assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape Ashing a guality product	 Select and use appropriate fruit and vegetables, processes and tools Use basic food handling, hygienic practices 				
	_	temporary methods e.g. glues or masking tape	_ =				
	Use tools e.g. scissors		• Use basic food handling hygienic practices				
		- Ashiova a guality product					
		Achieve a quality product	and personal hygiene				
	Evaluate						
	• Talk about my work, linking it to what I was asked to do.						
	• Evaluate their product by discussing how well it works in relation to the purpose.						
	• Evaluate their products as they are developed, identifying strengths and possible changes they might make.						
	• Evaluate their product by asking questions about what they have made and how they have gone about it.						
	Autumn	Spring	Summer				
<u>'ear 2</u>	Design						
	Have own ideas and plan what to do next.						
	Explain what I want to do and describe how I may do it.						
	• Explain purpose of product, how it will work and how it will be suitable for the user.						
	Describe design using pictures, words, models, diagrams.						
	Design products for myself and others following design criteria.						
	Choose best tools and materials, and explain choices.						
	Use knowledge of existing products to produce ideas.						
	Make	Make	Make				
	 Measure, cut and score with some accuracy 	Cut, shape and join fabric to make a simple	• Follow safe procedures for food safety and				
	 Use hand tools safely and appropriately 	garment. Use basic sewing techniques.	hygiene				
	 Assemble, join and combine materials in 	•Use simple finishing techniques to improve					
	order to make a product.	the appearance of their product					
	Evaluate						
	Describe what went well, thinking about design criteria and purpose.						
	• Evaluate their products as they are developed, identifying strengths and possible changes they might make.						
	• Evaluate their product by asking questions about what they have made and how they have gone about it.						
	• talk about what I would do differently if I were to do it again and why.						



	Autumn	Spring	Summer				
Year 3	 Design Learn about some inventors/designers/ engine Begin to understand by whom, when and whe Begin to research others' needs. Show design meets a range of requirements. Describe purpose of product. Follow a given design criteria. Have at least one idea about how to create profession. Create a plan which shows order, equipment as 	 Design Learn about some inventors/designers/ engineers/chefs/ manufacturers of ground breaking products. Begin to understand by whom, when and where products were designed. Begin to research others' needs. Show design meets a range of requirements. Describe purpose of product. Follow a given design criteria. Have at least one idea about how to create product. Create a plan which shows order, equipment and tools. Describe design using an accurately labelled sketch and words. Make design decisions. 					
	 Make Measure, mark out, cut, score and assemble components with more accuracy. Work safely and accurately with a range of simple tools. 	 Make Think about their ideas as they make progress and be willing change things if this helps them improve their work. Use finishing techniques strengthen and improve the appearance of their product using a range of equipment. 	Make Demonstrate hygienic food preparation and storage.				
	Evaluate Look at design criteria while designing and making. Use design criteria to evaluate finished product, eg. how well it meets the intended purpose. Say what I would change to make design better.						
	Autumn	Spring	Summer				
Year 4	 Design Evaluate existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose. Research whether products can be recycled or reused. Know about some inventors/designers/ engineers/chefs/manufacturers of ground-breaking products. Use research for design ideas. 						
	• Show design meets a range of requirements and is fit for purpose.						



•	Begin	to	create	own	design	criteria.
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- Have at least one idea about how to create product and suggest improvements for design.
- Produce a plan and explain it to others.
- Say how realistic plan is.
- Include an annotated sketch.
- Make and explain design decisions considering availability of resources.
- Explain how product will work.

Make

- 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.
- Join and combine materials and components accurately in temporary and permanent ways.

Make

- Sew using a range of different stitches, weave and knit.
- Measure, tape or pin, cut and join fabric with some accuracy.
- Use simple graphical communication techniques.

Make

 Demonstrate hygienic food preparation and storage.

Evaluate

- Begin to explain how I could improve original design.
- Use criteria to evaluate their work both during and at the end of the assignment.
- Evaluate their products carrying out appropriate tests.

Autumn Design

Year 5

Spring

Summer

- Use internet and questionnaires for research and design idea.
- Take a user's view into account when designing.
- Research whether products can be recycled or reused.
- Begin to consider needs/wants of individuals/groups when designing and ensure product is fit for purpose.
- Create own design criteria.
- Have a range of ideas.
- Produce a logical, realistic plan and explain it to others.

Make

Make

Make



 Select appropriate materials, tools and techniques. Measure and mark out accurately. Use skills in using different tools and equipment safely and accurately. 	Cut and join with accuracy to ensure a good- quality finish to the product.	 Weigh and measure accurately (time, dry ingredients, liquids). Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens. 				
 Evaluate Clearly explain how parts of product will work Evaluate a product against the original design Evaluate it personally and seek evaluation from 	n specification.					
Autumn	Spring	Summer				
 Draw on market research to inform design. Use research of user's individual needs, want Research whether products can be recycled o Identify features of design that will appeal to Create own design criteria and specification. Come up with innovative design ideas. 	r reused.					
 Make Select appropriate tools, materials, components and techniques. Assemble components make working models. Use tools safely and accurately. Construct products using permanent joining techniques. 	 Make Pin, sew and stitch materials together create a product. Make modifications as they go along. 	Make Weigh and measure accurately (time, dry ingredients, liquids) Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens.				
• Record their evaluations using drawings with	 Evaluate 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 that their product could be improved. 					

