St Bartholomew's C of E Primary School

Design and Technology Curriculum Overview



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Throughout all of the year groups cooking and nutrition projects, children will be taught aspects of a healthy diet and how to live a healthy lifestyle.

	EYFS		
Throughout reception, the children will focus on the following goals that will help them with DT in Year 1 and beyond.			
Physical development	on the following goald that will help them		
 Progress towards a more fluent style of moving, with developing control and grace. 			
•			
	 Develop their small motor skills so that they can use a range of tools competently, safely and confidently. 		
Expressive art and design	Use their core muscle strength to achieve a good posture when sitting at a table or sitting on the floor. Expressive att and design		
	artistic effects to express their ideas and fe	olinac	
•	•	•	
-	e learning, refining ideas and developing the	en ability to represent them.	
Create collaboratively, sharing ideas	, resources and skills.		
	Fine motor skills		
Use a range of small tools, including scissors, paintbrushes and cutlery.			
 <u>Creating with materials</u> Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. 			
		ting with colour, design, texture, form and function.	
Share their creations, explaining the			
	Year 1		
Throughout all three of the projects they need to:			
 Think of some of their own ideas and explain what they want to do. 			
 Explain what they are making and w 			
Talk about their own work and what			
Autumn	Spring	Summer	
Theme: Puppets	Theme: Fruit Kebabs	Theme: Moving pictures	
Textiles	Cooking and nutrition	Mechanisms	
Inventor study – Jim Henson (Creator of		Inventor study – Axel Scheffler	
the Muppets)			
	How can we be safe in the kitchen?		
How are puppets made?		Why do books and pictures use moving parts?	
M/h at we want the set to be any (average in the set of	What we want them to	What we want them to be available as	
What we want them to know/experience:	know/experience:	What we want them to know/experience	
	1. How to cut safely.	1. To know how to make a product that moves.	
2. To be able to cut materials with scissors.			

 To understand that models (puppets) are made out of different materials. To know that sewing is stronger than gluing. To be able to measure and cut textiles. To join textiles together. To say why they chose a textile. 	 To be able to compare taste and texture. How to properly wash their hand for food preparation. Knife skills – bridge grip to cut soft foods. 	 To know why some mechanisms have moving parts. To add some kind of design to their product.
Throughout all three of the projects they nee	Year 2	
 Choose the best materials and give r Describe their design using pictures, Join things in different ways. 	easons why they are best. models and words. nd how they could improve it next time.	Summer
	Spring Theme: Castles	
Theme: Fire engine Use of materials	Structures	Theme: Cooking
 Inventor study – Fire engine to visit school so children can investigate an actual fire engine. Skills: To make a model using different materials. To keep their work tidy. To make their model stronger if it needs to be. To measure the materials they use. To join materials in different ways. To try to incorporate some type of movement into their models 	 Inventor study – (Done through history lessons) Skills: To talk about how they will construct their product and make a sensible choice on which materials to use. To make a simple plan before making their structure. To consider how to improve their construction. 	 Cooking and nutrition Skills: To describe the properties of ingredients they are using. To explain what it means to be hygienic. To be hygienic in the kitchen.

	Year 3	
 Describe their design with an accurate Think what they could change to make 	th shows the order and what equipment the rely labelled sketch. re their designs better.	· · · · · · · · · · · · · · · · · · ·
Autumn	Spring	Summer
 Theme: Photo Frames Stiff and flexible sheet materials. Skills: To use the most appropriate materials. To cut and measure accurately. To join different materials together. To attempt to make their products strong. 	 Theme: Sandwich Snacks Cooking and nutrition Skills: To choose the right ingredients for a product (Sandwich/Scones) Use equipment safely. Describe how they used their ingredients to make their product. Knife Skills – To start to independently cut harder foods using the claw and bridge grips. 	 Theme: Money Containers Textiles Inventor study – (Done through history when they learn about rune bags) Skills: Design product that takes consideration of size, durability and practicality. To cut with accuracy. To join textiles in different ways. To choose textiles for their appearance and qualities. To consider how they can make their product stronger. To use a running stitch
	Year 4	
Throughout all three of the projects they need to:		

- To create a plan and also be able to explain their plan to others.
- To suggest improvements and say what is good and bad about other designs.
- To be conscience that their products will need to be liked by others.
- To show a good level of expertise when using equipment and tools they have used before.
- To be able to explain to evaluate their products think about both its appearance and how it worked.

Autumn	Spring	Summer
 Theme: Light up Signs Electrical and mechanical components Inventor study -Thomas Edison Skills: To create a simple circuit. To use a number of different components. To add things to a basic circuit. To alter products after testing if it doesn't work. To try out new ideas to improve circuit. 	Theme: Brazilian feijoada Cooking and nutrition Skills 1. To know how to be hygienic and safe. 2. To present food in an interesting way.	 Theme: Canopic Jars Mouldable materials Inventor study – (Done through history when they learn about the Egyptians) Skills: To select the most appropriate material. To shape and mould using a range of techniques. To use a finishing technique.
	Year 5	
 Throughout all three of the projects they need to: To create a detailed step by step plan, using alternative ideas and be able to say what is good and bad about both. To be able to explain why their finished product will be of good quality. 		

- To show a good level of expertise when using equipment and tools they have used before.
- To keep checking their product is the best it can be.

• To evaluate their product against the	original design criteria.	
Autumn	Spring	Summer
 Theme: Moving Toys Inventor study – Leonardo Di Vinci, Look at the mechanical lion. Skills: Understand that a cam can be used with a lever or a slider to change rotary motion into oscillating or reciprocating motion To refine their product after testing it. 	 Theme: Bridges Inventor study – The makers of the Golden Gate Bridge Skills: Decide on different ways of joining materials and which is the strongest. To measure and cut with accuracy to 1mm. To ensure their work is precise and accurate. To test and adapt product independently ensuring it is fit for purpose. To try to hide joints to improve the look of their products. 	 Theme: Greek Food Skills: To be able to describe what they need to be both hygienic and safe. To present their final product well. Knife skills – To dice harder foods into large evenly sized pieces.
Throughout all three of the projects they need	Year 6	
 To use a range of information to information to information. To work within constraints. To follow their plans and refine if nece To think of a way to test and evaluate To think of how different resources contact. 	m their designs. essary. e their product.	
Autumn	Spring	Summer
Theme: Funky Furnishings Inventor study – Vivien Westwood Skills:	Theme: Great British Dishes Skills:	Theme: Mobile phone holder Product research – Looking at mobile phone holders.

 To make their product attractive and strong. 	 To explain how their product should be stored. 	Skills:
 To think of what the user would want when choosing their textile. 	 Knife Skills – To use both grips independently with sharper 	 To select the appropriate materials to make product.
 To use a range of stiches independently. (Blanket, cross, running, overstitch) 	knifes. To finely dice food into evenly sized pieces.	 To ensure their work is precise and accurate. To think of ways to improve the look of their
 To think about how their product could be sold. 		product. 4. To try to make a product that meets all of the
To consider what would improve their product even more.		design criteria.