

Corporation Road Community Primary School

Design & Technology LTP

Design & Technology: Year 3/4A

Vision:

Design and Technology is an inspiring, rigorous and practical subject. 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. Design and Technology is split into four strands – Structures, Mechanical Systems, Textiles and Food. At Corporation Road, we would like children to draw on skills from a range of subjects such as mathematics, science, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Design and Technology education begins well before children begin their formal schooling. Children constantly explore their world through a variety of activities and it is vital for us to continue to extend this. The child's increasing understanding of the process of design and technology should match their intellectual and physical development throughout their primary education.

Domains:	Key Concepts:		
Making, Using and Understanding	Tools, Materials, Health & Safety, Repair & Maintenance, Textiles, Card Maki		
	Preparing & Cooking Food, Nutrition, Origins of Food		
Planning, Knowledge and Evaluation	Designing, Working from Plans, Existing Product Evaluation and Evaluation		

rianning, knowledge and Evaluation		
Autumn	Spring 2	
Theme: Legacy & Impact	Theme: Citizenship	Then
Domains:	Domains:	
- Making, Using and Understanding	- Making, Using and Understanding	- Making, Using and Unde
- Planning, Knowledge and Evaluation	- Planning, Knowledge and Evaluation	- Planning, Knowledge and
Key Concepts:	Key Concepts:	
- Tools, Materials, Health & Safety, Repair & Maintenance, Textiles	- Tools, Health & Safety, Preparing & Cooking Food, Nutrition and	- Tools, Materials, Health
and Joining	Origins of Food	Joining and Structures
- Designing, Working from Plans, Existing Product Evaluation and	- Designing, Working from Plans and Existing Product Evaluation	- Designing, Working from
Evaluation		
End Point:	End Point:	End Point:
Legacy & Impact	<u>Citizenship</u>	Gender & Equality
For children to understand and learn about legacies in design and	For children to understand that as citizens, we can use design and	For children to have an app
technology left behind by key individuals and communities, which	technology to help work towards the betterment of the whole	strands within design and t
have had an impact on the way in which we live our lives, and	community. Children will learn how to take risks, become resourceful,	you can contribute using a
influence what we learn, in society today. For children to develop	innovative, enterprising and capable citizens. Children will know that,	that irrespective of gender,
design and technology skills so that they can choose to have an impact	through design and technology, you can meet the needs, wants and	have an appreciation of and
on their immediate and wider environment and influence others. For	values of yourself and others.	children to have the skills a
children to have the knowledge and ability to make their own mark on		continuing design and tech
society knowing they themselves leave behind their own legacy.		a career.
Textiles – Make a protective overall	Food – African beef, black-eyed bean and plantain hotpot	Struct
- Purpose and user	- Design and make healthy dishes	- Design and look at nets
- Produce sketches	10-	a strength of the strength of
- Select materials and fastening for a purpose		

king, Joining, Structures, Mechanisms,

Summer 2

eme: Gender & Equality

Domains:

derstanding and Evaluation

Key Concepts:

Ith & Safety, Repair Maintenance, Card Making, s

om Plans and Evaluation

ppreciation and knowledge of the different d technology therefore understanding that a range of subject knowledge. To understand er, race, beliefs, culture or religion, you can and access to design and technology. For s and knowledge to have the option of chnology in higher education and/or through

uctures – Mummy Tomb ts



Year 3	Year 4	Year 3	Year 4	Year 3	Year 4
Select the appropriate tools and explain choices. Plan which materials will be needed for a task and explain why. Try an alternative way of fixing something, if their first attempt isn't successful. Create a simple pattern for a design. Join fabrics using a running stitch.	 Analyse the potential of a range of tools and use them with accuracy. Choose from a range of materials showing an understanding of their different characteristics. Follow health and safety rules when working with materials and substances. Describe how a product could be made better, stronger or more sustainable. Use a simple pattern to create a life-sized item of clothing. 	 Select the appropriate tools and explain choices. Follow health and safety rules for cooking and baking activities. Combine a variety of ingredients using a range of cooking techniques. Describe what a balanced diet is. Identify food which comes from the UK and other countries in the world. 	 Analyse the potential of a range of tools and use them with accuracy. Follow health and safety rules when working with materials and substances. Measure and weigh ingredients appropriately to prepare and cook a range of savoury dishes. Make healthy eating choices and explain why. Explain some of the processes that foods go through to preserve/make them more appealing. Collect information from a number of different 	 Select the appropriate tools and explain choices. Plan which materials will be needed for a task and explain why. Try an alternative way of fixing something, if their first attempt isn't successful. Cut slots in card and create nets. Create a shell or frame structure using diagonal struts to strengthen. 	 Analyse the potential of a range of tools and use them with accuracy. Choose from a range of materials showing an understanding of their different characteristics. Follow health and safety rules when working with materials and substances. Describe how a product could be made better, stronger or more sustainable. Use a glue gun with close supervision (one to one). Prototype and build frame and
 Share ideas through words, labelled sketches and models, recognising that designs have to meet a range of needs, including being fit for purpose. Make realistic plans, identifying processes, equipment and materials needed. Investigate the design features (including identifying components or ingredients) of familiar existing products. Suggest improvements to products made and describe how to implement them (taking the views of others into account). 	 Collect information from a number of different sources and use this information to inform design ideas in words, labelled sketches, diagrams and models, keeping in mind fi- tness for purpose and the end user. Make realistic, step by step plans, reflecting on designs as the product develops. Explain how an existing product is useful to the user. Identify what has worked well and what could be improved, evidencing and explaining the results of research. 	and models, recognising that designs have to meet a range of needs, including being fit for purpose. Make realistic plans, identifying processes, equipment and materials needed. Investigate the design features (including identifying components or ingredients) of familiar existing products.	 sources and use this information to inform design ideas in words, labelled sketches, diagrams and models, keeping in mind fitness for purpose and the end user. Make realistic, step by step plans, reflecting on designs as the product develops. 	 Share ideas through words, labelled sketches and models, recognising that designs have to meet a range of needs, including being fit for purpose. Make realistic plans, identifying processes, equipment and materials needed. Suggest improvements to products made and describe how to implement them (taking the views of others into account). 	 shell structures, showing awareness of how to strengthen, stiffen and reinforce. Collect information from a number of differe sources and use this information to inform design ideas in words, labelled sketches, diagrams and models, keeping in mind fitness for purpose and the end user. Make realistic, step by step plans, reflecting or designs as the product develops. Identify what has worked well and what coul be improved, evidencing and explaining the results of research.

Year 3 - Create and use simple gears, pulleys, cams, levers and linkages.

Year 4 - Use pulleys, levers and linkages in their products.



