

Cumwhinton School Curriculum - Design Technology Y1 SUM

Year 1	NC Content	<p>When designing and making, pupils should be taught to:</p> <p><u>Design</u></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><u>Make</u></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><u>Evaluate</u></p> <ul style="list-style-type: none"> ♣ explore and evaluate a range of existing products ♣ evaluate their ideas and products against design criteria ♣ 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><u>Food and Nutrition</u></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
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Design	Make	Evaluate	Technology Vocabulary
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Mapping across the Year

	AUTUMN	SPRING	SUMMMER
Design		To understand where food comes from.	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
Make		To be able to use the basic principles of a healthy and varied diet to prepare dishes	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
Evaluate		To evaluate own cooking - how could it be improved next time? How could the recipe be adapted?	Explore and evaluate a range of existing products Evaluate their ideas and products against design criteria
Technology Vocabulary		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.	

CONCEPTUAL SCHOOL AMBITION DRIVERS

	EYFS & KS1	LKS2	UKS2
AUT	Diversity	Fairness	Individuality
SPR	Truth	Change	Resilience
SUM	Responsibility	Equality	Sustainability

DT - SUMMER YEAR 1
HUMANITY - Equality

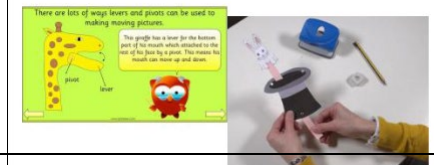
Design

Make

Evaluate

Technology Vocabulary

	NC	CUMWHINTON CURRICULUM
Design	<p>Design purposeful, functional, appealing products for themselves and other users based on design criteria</p> <p>Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</p>	<p>Project focus - To make a moving picture.</p> <p>Design</p> <p>Discuss with the children a collection of books, cards and other products that have moving parts. <i>What does the moving part do? How does it work? What effect does it have? ... Surprise? Does it show how something works? Does it work well?</i></p> <p>Use a simple moving picture book to talk about how levers and sliders can be used to make movement and bring stories to life.</p> <p>Use some examples of simple lever and sliding mechanisms made from card or construction kits to discuss with the children how these mechanisms work. Introduce new vocabulary eg 'lever' and 'pivot'.</p> <p>Ask the children to investigate products that include levers eg a balance, a pair of scissors. Encourage children to make drawings with arrows to show movement and label parts/materials eg blade, handle, metal.</p> <p>Get the children to think about/ discuss what picture they would like to make which will include movement.</p> <p>Use a design template to draw the design of the moving picture and add information about how it will work.</p>
Make	<p>Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</p> <p>Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</p>	<p>Make</p> <p>Use a range of tools and equipment to make the moving picture, and decide which materials would work best.</p> <p>Method 1 - To make a moving picture - Make a single hole then cut two slits. Tape the character/ item to the end of the card slider then push it through the slits to move it along from left to right.</p> <p>Method 2 - Use double-sided sticky pads or tape to stick a strip of card down. Place the slider with the character/ item attached underneath the card strip and move it along from left to right.</p> <p>Method 3 - Use double sided sticky tape or sticky pads to stick a card strip across the slider. This will allow the slider to run smoothly. Then move the character up and down.</p> <p>Children could practise stiffening - give them a picture from a newspaper, ask them to make the arms move by cutting and using paper fasteners. If the arms are too floppy, show how to make them stiffer with straws and pipe cleaners.</p>
Evaluate	<p>Explore and evaluate a range of existing products</p> <p>Evaluate their ideas and products against design criteria</p> <p>Technical Knowledge</p>	<p>Evaluate</p> <p>Look at some examples of moving pictures - these can be the same examples shown to the children in the design stage. Give children the opportunity to evaluate their design against other designs. Encourage children to use key vocabulary when evaluating.</p> <p>Children will create a moving picture - whilst making this children can talk about the materials they need and which will work best - which will be stronger but whilst will be flexible allowing movement. Children to make sliders, to make an item or character in their picture move.</p>



	<p>Build structures, exploring how they can be made stronger, stiffer and more stable</p> <p>Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</p>	
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