Cumwhinton School Curriculum - Design Technology Y4 SUM

Year NC
4 Content

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment].

When designing and making, pupils should be taught to:

<u>Design</u>

- 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

As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

Pupils should be taught to:

- 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.

Design Technology					
Design	Make	Evaluate	Technology Vocabulary		
Mapping across the	Year				
	AUTUMN	SPRING	SUMMMER		
Design		To 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. To generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design	Cooking and Nutrition To understand and apply the principles of a healthy and varied diet To understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.		
Make		To 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	To prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques		
Evaluate		To investigate and analyse a range of existing products. To evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. To understand how key events and individuals in design and technology have helped shape the world			
Technology Vocabulary		To 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] To understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] To apply their understanding of computing to program, monitor and control 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 4		
HUMANITY - Equality		

HUMANITY - Equality Tachnology Veschulons					
Design Make Evaluate Technology Vocabulary How can we create a balanced meal?					
	NC CUMWHINTON CURRICULUM				
Design	To understand and apply the principles of a healthy and varied diet To understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.	each section? Do they know why they should aim to eat 5 or more portion of fruit and veg every day? What does seasonality mean? Do they understand the concept of food miles? Discuss the ingredients in a pizza			
Make	To prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques	Share the recipe for Lynne's pizza (from Phunky foods) Can they identify each ingredient? Can we use local produce? Local f Follow the pizza recipe with the whole class - in groups or together. How could we create our own balanced pizzas?			
Evaluate Technology Vocabulary	To evaluate own cooking – how could it be improved next time? How could the recipe be adapted?	Evaluate own pizzas, how did they taste? What went well? How could recipe be adapted? Follow a recipe; follow food safety & hygiene rules; tidy away; mix to scales; cut using bridge/claw technique safely; spread with a knife/	o form a dough; knead; shape dough; use weighing		
