DESIGN & TECHNOLOGY Overview



Area of Learning:

EYFS

Expressive Arts and Design

Aspects:

Creating with materials

Design and Technology National Curriculum KS1

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 and school, gardens and playgrounds, the local community, industry and the wider environment].

When designing and making, pupils should be taught to:

Design

- 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

- 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

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria

Design and Technology National Curriculum KS2

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: Design

- 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

- 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

- 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

Children at the	- evaluate their ideas and products against design effectia	1404	1/04		11/00	11/00		
expected level of	Technical Knowledge	KS1	KS1	Technical Knowledge	LKS2	LKS2	UKS2	UKS2
development will:	Pupils should be taught to:	Cycle 1	Cycle 2	Pupils should be taught to:	Cycle 1	Cycle 2	Cycle 1	Cycle 2
Cafaluusaasad	build structures, exploring how they can be made stronger, stiffer and	SPG 2	SUM 2	apply their understanding of how to strengthen, stiffen	AUT 1	SUM 1		AUT 2
Safely use and	more stable	Draw	Railway	and reinforce more complex structures	Greek	Bridges		Structures
explore a variety of materials, tools and		bridge	Bridge		Textiles			
	explore and use mechanisms [for example, levers, sliders, wheels and	AUT 2	AUT 2	understand and use mechanical systems in their	SUM 1		AUT 2	SPG 2
techniques,	axles], in their products.	Moving	Post	products [for example, gears, pulleys, cams, levers and	Roman		Spinning	Moving
		pictures	delivery	linkages]	Catapults		Planets	Vehicle
experimenting with colour, design, texture,			vehicle					
				understand and use electrical systems in their products		SPG 1	SPG 1	
form and				[for example, series circuits incorporating switches,		Science link	Burglar	
function. Share their				bulbs, buzzers and motors]		Loop game	Alarm	
				apply their understanding of computing to program,				
				monitor and control their products.				
creations,	Cooking and Nutrition			Cooking and Nutrition				
explaining the	Pupils should be taught to:			Pupils should be taught to:				
process they	use the basic principles of a healthy and varied diet to prepare dishes	SUM 2	SPG 1	understand and apply the principles of a healthy and	SPG 2	AUT 2	SUM 1	SUM 2
have used.		Food for	Food	varied diet	Italian	Scandanavian	Seaside	Making
		an athlete	from the		Food	Buffet	Picnic	Soup
			UK					
	understand where food comes from.	SUM 2	SPG 1	prepare and cook a variety of predominantly savoury	SPG 2	AUT 2	SUM 1	SUM 2
		Food for	Food	dishes using a range of cooking techniques	Italian	Scandanavian	Seaside	Making
		an athlete	from the		Food	Buffet	Picnic	Soup
			UK					
			UK	understand seasonality and know where and how a	SPG 2	AUT 2	SUM 1	SUM 2
				variety of ingredients are grown, reared, caught and	370 2	AUTZ	20INI T	SUIVI Z
				processed.				

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