



Design & Technology Cycle 2 Long Term Coverage

Building tomorrow, leading the way...

Autumn 1 Why are we Special?	Autumn 2 Can you tell me a tale?	Spring 1 Why are animals amazing?	Spring 2 Can we go and explore?	Summer 1 What happened before?	
Art & Design: Creating with Materials	Art & Design: Creating with Mate- rials	Art & Design: Creating with	Art & Design: Creating with Materials Children will make props and costumes	Art & Design: Creating with Materials	Art Chi a evo
Children will experiment mixing with colours. Understanding of primary and secondary colours	Children will experiment with dif- ferent textures.	Materials Children will experiment with	for different role play scenarios.	Children will explore and use a variety of artistic effects to express their ideas and feel-	
Possible focus Artists:	Andy Goldworthy	different textures and col- ours.	Children will safely explore different techniques for joining materials.	ings.	She use
Piet Mondrian The Dot - Making Marks	Exploring materials to make bridges for the three goats and testing materials for Little Red Riding Hood cape	Children will experiment with different patterns and col- ours. Children to help create a new		Share their creations, explain- ing the process they have used	
Opportunities for junk modelling, joining materials together.	Making the three pigs homes with different materials including the use of masking tape/card/ paper straws/sticks/ bricks to builds and balance.	role play area sharing their creating ideas Animal patterns and camou- flage	Making rain makers - musical instruments.	Looking at objects from the past including toys and objects from the home. Discussion on how they work? What are they	
	Christmas crafts—focus on com- bining different materials			used for? Explore and com- pare.	We
	Clay Divas—Diwali				

Opportunities for exploring tools and techniques through child initiated and child's own lines of development. Opportunities for exploring tools and techniques through child initiated and child's own lines of development.

CREATIVE OUTCOME - Early Learning Goal

Creating with materials—ELG: Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Share their creations, exploring the process they have used. Make use of props and materials when role playing characters in narratives and stories.



Summer 2

Why is there a commotion in the ocean?

t & Design: Creating with Materials ildren will share creations, talk about process and aluate their work.

nare their creations, explaining the process they have ed.

nd sculpture It dough sealife alife 3D pictures eaving

¥1&2		Design &Technology Cycle 2 Long Term Covera	ge	
Autumn 1	A2	Building tomorrow, leading the way Spring 1	52	
CONSTRUCTION—'Follow Me'	x	FOOD TECHNOLOGY—'A Healthy Dish'	Mechani	sms -
Outcome: to assemble components to build a wheeled vehi- cle		make and evaluate a fruit salad	(make a wi	nding n
Design		Design		
Identify simple design criteria by looking at existing products. Children to lool at a range of toy vehicles and discuss how they move.	ĸ	Identify simple design criteria by looking at existing products. Taste a variety of different fruits which they might use in their fruit salad.	Evaluate a range of existi and investigate how they	ing produc work.
Children to explore using the wheels and dowels and see how they work. Explore		Evaluate taste, texture and smell. Discuss what ingredients will work well together.	Children to create a desig	gn brief b
Children to draw a range of ideas for their own 'wheeled' vehicle, labelled with		Draw a range of ideas labelled with key ingredients.	Using the design brief, dr features.	raw a rang
key features.		Children to select their chosen design, giving reasons why.	Model and construct idea	s using pla
Children to select their chosen design, giving reasons why.		Children to discuss the equipment/ ingredients they will need and	and communicate design o	outcomes
Children to discuss the equipment they will need and discuss safety when using	}	discuss safety when using tools.	Children to select their c	hosen des
T0015.			Children to discuss the eq tools.	quipment ·



Make	Make	
Children to select and use a range of materials and tools to construct with., demonstrating safety.	Select ingredients chosen in plan and create their healthy snack/ meal.	Incorporate a moving mechanism i wheels.
Children cut, join, glue pieces of equipment together.	 Use a range of cooking skills to create planned design. 	Select and use a range of materia
Finish structure by colouring/painting/decorating.	 Show a good understanding of how to stay safe in the kitchen (using toolls correctly, washing hands, wearing aprons) 	Finish product by colouring/paintin pivot, axel, wheels
Evaluate	Evaluate	
Children to evaluate their own construction against the design criteria and/or existing products. (How was I successful? How could I improve? Did I have to change anything?)	Taste and identify flavours/textures - explain why they enjoyed some foods.	Children to evaluate their mechan products. (How was I successful? thing?)
Peer evaluate and justify (I like this one because This one is good because it has) • Understand the terms functional and purposeful and identify how the product can be used purposefully and functionally.	Evaluate meal against healthy diet criteria What would the do differently? Change? Keep the same?	Peer evaluate and justify (I like the has) • Understand the terms fun product can be used purposefully of the terms function of terms functio
Key Vocabulary	Key Vocabulary	I
Cut, fold, join, fix structure, wall, tower, framework, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved, metal, wood, plastic circle, triangle, square, rectangle, cuboid, cube, cyl- inder	Fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients,	slider, lever, pivot, slot, bridge/gu pull, push, up, down, straight, curv



Summer 1

52

- Fighting the Great Fire mechanism to lift a bucket)

Design

ucts. Look at examples of winding mechanisms

based on what they have learnt.

nge of ideas for their product, labelled with key

laydough or other modelling materials. Discuss s with peers/teachers.

esign, giving reasons why.

they will need and discuss safety when using







into a product e.g. slider, lever or axel and

als and tools to create chosen product.

ing/decorating. move, direction, slider, lever,

Evaluate

nism against the design criteria and/or existing How could I improve? Did I have to change any-

his one because... This one is good because it nctional and purposeful and identify how the and functionally.

Key Vocabulary

uide, card, masking tape, paper fastener, join, ve, forwards, backwards

		Design & Technology					
(Y3&4)		Cycle 2		Long Term Coverage		
A1	Autumn 2	51	Building tom	waxxa	, leading the way Spring 2	51	
x	FOOD TECHNOLOGY — Perfect Pizza	x	MECHA	NISMS-	-Moving books (levers and sliders)	×	
	Outcome: Children to design and make own pizza. They create pizza base and add toppings.		Outcome: Childre	en to crea	ate a 'moving picture book' for the reception class		
	Design				Design		
	Children to research a range of existing products. Children to taste pizzas with different toppings. And make notes on tastes, visual appeal etc. Children to create a 'design brief' for a new product. Create a selection of design ideas using their research of existing products. Chil- dren to consider; taste, visual appeal, cost. What will the base be like? How healthy/ balanced will it be? Children draw exploded diagram to communicate design ideas. Children label all ingredients		Children to research of them good? How do the and levers. Explore levers and slip Create prototypes of Create a 'design brief Create a selection of Draw an exploded diag	a range of hey work? iders and i levers and f' for a new design ide grams, ann	existing products and evaluate them. What makes Look at examples of children's books with sliders nvestigate how they work. d sliders. v product. eas using their research of existing products. notated with design ideas.		Research a range of ex uct. Create a selection of c Draw simple, annotated
	Make				Make		
	Children to gather tools and ingredients to prepare and make their Pizza using basic cooking skills and techniques.		Select and use tools v Understand and use le	with some evers and	accuracy to cut, shape and join paper and card. linkages and fixed pivots.		Select appropriate main Measure, tape or pin, c fabric pattern piece
chow a clear understanding of hearth and safety in the kitchen.			Use finisning techniqi	ues suitab	ie for the product.	rubi ic, putter il piece,	

Select from and use a range of tools and equipment to perform practical tasks (chop, wash, grate, slice, mix, sprinkle, bake).

Children to make the base for their pizza and add toppings.

Evaluate		Evaluate			
Children to product as	evaluate work during the making process – tweak and improve the necessary.	Evaluate work during the making process – tweak and improve the product as nec- essary.	Evaluate work during the essary.		
Self-evaluate products against design criteria (How well does it meet its intend- ed purpose?) Do the different toppings compliment each other? What could be		Self-evaluate products against design criteria (How well does it meet its intended purpose?)	Self-evaluate products (ed purpose?)		
done differ Peer evaluc and purpos	rently? Ite giving explanations to justify opinion. (Is their product functional eful? Suggest specific ways in which it could it be improved.)	Peer evaluate giving explanations to justify opinion. (Is their product functional and purposeful? Suggest specific ways in which it could it be improved.)	Peer evaluate giving exp and purposeful? Sugges		
	Key Vocabulary	Key Vocabulary			

name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet mechanism, lever, linkage, pivot, slot, bridge, guide system, input, process, output linear, rotary, oscillating, reciprocating

fabric, names of fabrics, names of stitches fastening, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance,



Summer 2

TEXTILES

Design

xisting products and create a 'design brief' for a new prod-

design ideas using their research of existing products. Id sketches communicate design ideas.

Make

terials, techniques and tools to make product.

Measure, tape or pin, cut and join fabric with some accuracy. weave, sew, knot, fabric, pattern piece, pin, cut, join, finish

Evaluate

the making process - tweak and improve the product as nec-

s against design criteria (How well does it meet its intend-

xplanations to justify opinion. (Is their product functional est specific ways in which it could it be improved.)

Key Vocabulary



Make	Make	
Children create templates from card for their designs.	Children to make their lighthouse building which will house a light.	Use and apply the principles o
Children select and use a range of materials, tools and equipment	Children select and use a range of materials, tools and equipment	Prepare and make a savoury d
Use carefully selected materials to create a well-assembled, functional and pur- poseful product.	Use carefully selected materials to create a well-assembled, functional and purposeful product.	Apply a clear understanding o
Children to stitch and fill their toy and add details to improve appeal.	Children to create their circuit and computer program to control the light.	Chop, wash, grate, slice, mix,

draw out the electrical circuit and write the computer program.

Evaluate	Evaluate		
Evaluate work during the making process - tweak and improve the product as ne	c- Evaluate work during the making process - tweak and improve the product as	Evaluate work during the mak	
essary.	necessary.	Peer and self-evaluate produ	
Peer and self-evaluate products against design criteria considering functional	sidering functional Peer and self-evaluate products against design criteria considering function-		
properties and aesthetic qualities.	al properties and aesthetic qualities.	Evaluate product against exis	
Evaluate product against existing products and suggest ways their product could	d Evaluate product against existing products and suggest ways their product	improved.	
be improved.	could be improved.	Consider the views of other o	
Consider the views of other and accept criticism and suggestions to improve the work.	eir Consider the views of other and accept criticism and suggestions to improve their work		
Key Vocabulary	Key Vocabulary		
seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template pattern pieces, name of textiles and fastenings used, pins, needles, thread, pink shears, fastenings,	reed switch, toggle switch, push-to-make switch, push-to-break switch, light dependent resistor (LDR), tilt switch, light emitting diode (LED), bulb, bulb holder, battery, battery holder, USB cable, wire, insulator, conductor, croc- odile clip control, program, system, input device, output device, series cir- cuit, parallel circuit	ingredients, yeast, dough, bro fat, sugar, carbohydrate, pro dairy, allergy, intolerance, sav stir, pour, mix, rubbing in, wh	



Summer 2

FOOD TECHNOLOLGY

Design and make flavoured bread rolls.

Design

Research and evaluate a range of existing products to inform own designs. • Research and identify design criteria for a product aimed at particular individuals or

Create detailed annotated sketches, models, cross-sectional and exploded diagrams to

Begin to understand how computer-aided design can be used to communicate design

Make

of a healthy diet.

dish using increasingly complexed and independently applyues.

of health and safety in the kitchen.

roll, boil, bake, drain, knead, rub, season, simmer, stir-fry

Evaluate

king process – tweak and improve the product as necessary. Icts against design criteria considering functional proper-

sting products and suggest ways their product could be

and accept criticism and suggestions to improve their work

Key Vocabulary

an, flour, wholemeal, unleavened, baking soda, spice, herbs otein, vitamins, nutrients, nutrition, healthy, varied, gluten, woury, source, seasonality utensils, combine, fold, knead, nisk, beat, roll out, shape, sprinkle, crumble