

Progression in Design and Technology 2022 - 2023



Strand	Early Years	Year 1	Year 2	Year 3
	End Points	By the end of key stage 1:	Lower Key Stage 2	
Design	Expressive Arts and Design Creating with Materials ELG Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form, and function Process statements: Pupils will be taught to: Communication and Language • Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen. • Engage in Non-Fiction books Physical Development • Develop their small-motor skills so that they can use a range of tools, such as; pencils, paintbrushes, scissors, knives, forks and spoon Expressive Arts and Design • Explore different materials freely, to develop their ideas and how to use them and what to make. • Develop their own ideas and then decide which materials to use to express them. Respond to what they have heard expressing their thoughts and feelings. • Explore, use and refine a variety of artistic effects to express their ideas and feeling. • Create closed shapes with continuous lines and begin to use these shapes to represent shapes. • Draw with increasing complexity and detail, such as representing a face with a circle and including details. • Develop their own ideas and then decide which materials to use to express them. • Respond to what they have heard expressing their thoughts and feelings. Key vocabulary Scissors, cut, join, decoration, colour, design, texture, 'what will it do?'	* Generate, develop, model and communicate their idappropriate, information and communication technolo Key vocabulary	eas through talking, drawing, templates, mockups and, where gy. oration, design, texture, 'what is it's function?', change, End points Children can: *use their knowledge of existing products and their own experience to help generate their ideas. *design products that have a purpose and are aimed at an intended user *explain how their products will look and work through talking and simple annotated drawings *understand and follow simple design criteria *work in a range of relevant contexts, for example imaginary, story-based, home, school and the wider environment. Year 2: * design models using simple computing software *plan and test ideas using templates and mock-ups	Children use research and develop design criterias to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups. - identify the design features of their products that will appeal to intended customers. - use their knowledge of a broad range of existing products to help generate their ideas. - explain how particular parts of their products work. - use annotated sketches and crosssectional drawings to develop and communicate their ideas. - when planning, start to explain their choice of materials and components including function and aesthetics. - develop and follow simple design criteria.
Make	End Points Expressive Arts and Design - Creating with Materials ELG Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form, and function.	**End Points By the end of key stage 1: **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 **Key vacabulary**		Lower Key Stage 2 Children select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping,

Physical development - FMS ELG Join, measure, cut, shaping, material, component, construction, textile, felt, ingredients, selection, embellish, Develop their small-motor skills so that characteristics they can use a range of tools, such as: **End Points End Points** pencils, paintbrushes, scissors, knives, forks Children can: Children can: and spoon *Follow a simple plan or recipe *Follow a simple plan or recipe Personal, Social and Emotional *begin to select from a range of hand tools and *begin to select from a range of hand tools and Development - Managing Self ELG equipment, such as scissors, graters, zesters, safe equipment, such as scissors, graters, zesters, safe Be confident to try new activities and show knives, juicer; knives, juicer; independence, resilience and perseverance *select from a range of materials, textiles and *select from a range of materials, textiles and in the face of challenge components according to their characteristics; components according to their characteristics; Practical Practical skills and techniques skills and techniques Process: *learn to use hand tools and kitchen equipment safely and *learn to use hand tools and kitchen equipment Pupils will be taught to: Personal, social and emotional development safely and appropriately and learn to follow hygiene appropriately and learn to follow hygiene procedures; Select and use activities and resources, with procedures: *use a range of materials and components, including help when needed. This helps them to achieve *use a range of materials and components, including textiles and food ingredients; a goal they have chosen, or one which is suggested to them. *assemble, join and combine materials, components or textiles and food ingredients; Physical Development *assemble, join and combine materials, components ingredients; Choose the right resources to carry out their *manipulate fabrics in simple ways to create the desired or ingredients; own plan. Use large muscle movements to make marks. *manipulate fabrics in simple ways to create the effect; Expressive Arts and Design *cut, peel and grate ingredients, including measuring and desired effect: Explore, use and refine a variety of artistic *cut, peel and grate ingredients, including weighing ingredients using measuring cups; effects to express their ideas and feeling. Return to and build on their previous learning, measuring and weighing ingredients using measuring *begin to use simple finishing techniques to improve the refining ideas and developing their ability to appearance of their product, such as adding simple represent them. *begin to use simple finishing techniques to improve decorations Create collaboratively, sharing resources and skills. the appearance of their product, such as adding Join materials and explore different textures. simple decorations Year 2 *with help, measure and mark out; Respond to what they have heard expressing their thoughts and feelings. *cut, shape and score materials with some accuracy * demonstrate how to cut, shape and join fabric to make Key vocabulary a simple product; join, stronger, shaping, cutting, fabric, glue *use a basic running stitch; **Fvaluate End Points** End Points By the end of key stage 1: *explore and evaluate a range of existing products Expressive Arts and Design Creating with

*evaluate their ideas and products against design criteria

Research, explore, evaluate, product, compare, postitive, negative, design, criteria, refine

Key vocabulary

Materials ELG

process they have used.

*Share their creations, explaining the

Lower Key Stage 2

joining and finishing]

- place the main stages of making in

a systematic order. - learn to use a

range of tools and equipment safely.

learn to follow hxygiene procedures.

material and components with some

- demonstrate how to measure, cut,

accuracy to make a simple product.

- begin to select and use different

and appropriate finishing techniques

shape and join fabric with some

to improve the appearance of a

product such as hemmina, tie-dve.

fabric paints and digital graphics.

appropriately and accurately and

- cut, shape and score materials

with some degree of accuracy.

- assemble, join and combine

degree of accuracy.

accurately.

Children investigate and analyse a range of existing products. They evaluate their ideas and products against their own design

Process:

Pupils will be taught to:

Communication and Language

- Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen.
- Engage in Non-Fiction books

Expressive Arts and Design

- Respond to what they have heard expressing their thoughts and feelings.
- Explore, use and refine a variety of artistic effects to express their ideas and feeling.
- Return to and build on their previous learning, refining ideas and developing their ability to represent them.

Key vocabulary

Explore, design, problems, work, happen, non-fiction, ideas, feelings,

End Points

Children can:

- *explore and evaluate existing products mainly through discussions and comparisons
- *explain positives and things to improve for existing products
- *explore what materials products are made from
- *talk about their design ideas and what they are making
- *as they work, start to identify strengths and possible changes they might make to refine their existing design
- *evaluate their products and ideas against their simple design criteria

End Points

Children can:

- *explore and evaluate existing products mainly through discussions, comparisons and simple written evaluations
- *explain positives and things to improve for existing products
- *explore what materials products are made from
- *talk about their design ideas and what they are making
- *as they work, start to identify strengths and possible changes they might make to refine their existing design
- *evaluate their products and ideas against their simple design criteria
- *start to understand that the process sometimes involves repeating different stages of the process

criteria and consider the views of others to improve their work.

- explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose.
- explore what materials/ingredients products are made from and suggest reasons for this
- evaluate the key events, including technological developments, and designs of individuals in design and technology that have helped shape the world.

Technical Knowledge

End Points

Expressive Arts and Design Creating with Materials ELG

 Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form, and function.

Physical development - FMS ELG

Develop their small-motor skills so that they can use a range of tools, such as; pencils, paintbrushes, scissors, knives, forks and spoon

Personal, Social and Emotional Development – Managing Self ELG

Be confident to try new activities and show independence, resilience and perseverance in the face of challenge

Process:

Pupils will be taught to:

Expressive Arts and Design

- Make imaginative and complex 'small world' with blocks and construction kits such as city with different buildings and a park.
- Explore different materials freely, to develop their ideas and how to use them and what to make
- Develop their own ideas and then decide which materials to use to express them.
- Join materials and explore different textures.

End Points By the end of key stage 1:

*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.

Key vocabulary

Mechanism, lever, slider, wheel, axel, balance, movement, stronger, stiffer, sturdy, stable, ideas, test, adjust

End Points

Children can:

- *build simple structures, exploring how they can be made stronger, stiffer and more stable
- *talk about and start to understand the simple working characteristics of materials and components
- *explore and create products using mechanisms, such as levers and slider

End Points

Children can:

- *build simple structures, exploring how they can be made stronger, stiffer and more stable
- *talk about and start to understand the simple working characteristics of materials and components
- *explore and create products using mechanisms, such as levers, sliders and wheels.

Lower Key Stage 2

Children apply their understanding of how to strengthen, stiffen and reinforce more complex structures.

- understand that materials have both functional properties and aesthetic qualities.
- understand and demonstrate how mechanical and electrical systems have an input and output process.
- explain how mechanical systems such as levers and linkages create movement.
- use mechanical systems in their products.

	Explore, use and refine a variety of artistic effects to express their ideas and feeling. Return to and build on their previous learning, refining ideas and developing their ability to represent them. Physical Development Use large muscle movements Key vocabulary Small world, construction, materials, movement, slide, turn, lift, ideas, test, change,					
Cooking and	End Points	End Points By the end of key stage 1:	•	Lower Key Stage 2		
Nutrition	Physical development - FMS ELG	*to use a range of materials creatively to design and make products;		Children understand and		
	Develop their small-motor skills so that they can use a range of tools, such as; pencils, paintbrushes, scissors, knives, forks and spoon	*to develop a wide range of art and design technique space; Key vocabulary	apply the principles of a healthy and varied diet. - They prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.			
	Personal, Social and Emotional Development - Managing Self ELG	Ingredients, healthy choices, hygiene, wash, germs, tools, mix, kneed, sift, rise, yeast		 They understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed. 		
	Be confident to try new activities and show independence, resilience and perseverance in the face of challenge	End Points	End Points	- start to know when, where and how food is grown (such as herbs.		
		Children can:	Children can:	tomatoes and strawberries) in the		
		*explain where in the world different foods	*explain where in the world different foods originate	UK, Europe and the wider world with support, use a heat source to		
	Manage their own basic hygiene and	originate from	from	cook ingredients showing awareness of the need to control the		
	personal needs, including dressing, going to	*understand that all food comes from plants or	*understand that all food comes from plants or animals	temperature of the hob and/or		
	the toilet, and understanding the importance of healthy food choices.	animals	*understand that food has to be farmed, grown	oven Eatwell Guide and be able to apply		
	importance of healthy food choices.	*understand that food has to be farmed, grown elsewhere (e.g. home) or caught	elsewhere (e.g. home) or caught	these principles when planning and		
	Process:	*name and sort foods into the five groups in the	*name and sort foods into the five groups in the Eatwell Guide	cooking dishes understand that to be active and		
	Pupils will be taught to:	Eatwell Guide	*understand that everyone should eat at least five	healthy, nutritious food and drink are needed to provide energy for		
	Understanding the world	*understand that everyone should eat at least five	portions of fruit and vegetables every day and start to	the body.		
	and changes they notice Personal, Social and Emotional Development:	portions of fruit and vegetables every day and	explain why	 prepare ingredients using appropriate cooking utensils. 		
	Know and talk about the different factors	start to explain why	*use what they know about the Eatwell Guide to design	- measure and weigh ingredients to the nearest gram and millilitre.		
	that support their overall health and wellbeing, healthy eating.	*use what they know about the Eatwell Guide to design and prepare dishes.	and prepare dishes.	-start to independently follow a recipe.		
	Key vocabulary			- start to understand seasonality.		
	Healthy eating, different, food, ingredients,					
	choice, change, knife, fork, spoon, mix					