

Progression in DT

Curriculum Drivers: Well-being, Diversity & Inclusion, Real-life experiences, Oracy, Vocabulary Development

Early Years

Design and Technology (DT) in Early Years is taught through first-hand experiences. Children are encouraged to explore, observe, solve problems, think critically, make decisions and talk about why have made those decisions. All of this is facilitated through the planning of the EYFS's Expressive Arts and Design development. Expressive Arts and Design encompasses a wide breadth of creative areas, such as listening and responding to music, singing, dancing and performing, experimenting with colour mixing and different textures, creating models, for example, junk modelling, cooking, small world, construction and role play.

Cultural Capital (visitors, trips, competitions, experiences)

Year 1

Tasting a variety of food from around the world

Home learning grid
Cultural celebrations
Week

French Café

Year 2

Home learning grid
Pizza Making

Cultural celebration
Tasting a variety of food

French Café

Year 3

Craft Club

Home learning grid

Bread Making

DT competition

Cultural celebration

French Café

Year 4

Craft Club

Seasonal foods

DT competition

Cultural celebrations
week

French Café

Discussing
accessibility when
designing a product,
{disabilities}

Year 5

Fashion & textiles HT
project

Tasting/studying
bread products from
different parts of the
world

Studying fashion
from different
cultures

French Café

Year 6

Light decorations
linked to religious
festivals

Comparing burgers
from around the
world

Develop awareness
of allergies and
providing food that is
safe for all

Explore bridges from
around the world

Links with geography
topics

French Café

SUBSTANTIVE KNOWLEDGE

Topics and vocab	<p>Moving Pictures Moving mechanism Sliding mechanism Wheel mechanism Levers Pivots</p> <p>Homes Investigate Materials Interior Design House</p> <p>Eat more fruit and vegetables Fruit Vegetables Food groups Variety Recipe</p>	<p>Puppets Materials Features Purpose Sewing techniques Finger puppets</p> <p>Perfect Pizzas Pizza toppings Balanced plate Bread-based</p> <p>Vehicles Vehicles Features Functions Axles and chassis</p>	<p>Moving Santas Pneumatic systems Examine Sketch Plan Label Design Evaluate prototype</p> <p>Photograph Frames Free -standing objects Strengthening Paper & card Prototype</p> <p>Sandwich Snacks Nutritional content Grouping food Healthy Diet Bread Filling</p>	<p>Alarms Alarm system Purpose Scenarios</p> <p>Money Containers Decoration Hand sewing techniques Templates</p> <p>Seasonal Food Farming methods Ripening Seasonal Healthy Diet Quality Assurance Mark</p>	<p>Bread Nutritional content Surveys Ingredients Plaiting Recipe</p> <p>Fashion and Textiles Natural and synthetic textiles Fashion designers Pattern pieces</p> <p>Moving Toys Mechanisms Cam mechanism Linear movement</p>	<p>Electric Light Decorations Electric motors Rotate Circuit Appearance - aesthetics</p> <p>Bridges Beam Deck Pillar Truss Arch Suspension bridge Compression force</p> <p>Burgers Nutrition facts Burger patties Burger sauce Burger bun Flavour, texture, appearance</p>
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DISCIPLINARY KNOWLEDGE

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
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Design	Find out information about focus item (materials, features, purpose).	Discuss items (focus item for unit of work) in terms of features, materials and purpose.	Identify features of an item (focus item for unit of work).	Investigate local food production techniques.	Bread	Research current examples of the outcome for the unit.
	Draw on their own experience to help generate ideas.	Generate ideas by drawing on their own and other people's experiences.	Learn how focus items work.	Generate ideas, considering the purposes for which they are designing.	Fashion & Textiles	Communicate their ideas through detailed labelled drawings.
	Suggest ideas and explain what they are going to do.	Develop their design ideas through discussion, observation, drawing and modelling.	Generate ideas for an item, considering its purpose and the user/s.	Make labelled drawings from different views showing specific features.	Moving Toys	Develop a design specification that meets a design brief.
	Identify a target group for what they intend to design and make.	Identify a purpose for what they intend to design and make.	Identify a purpose and establish criteria for a successful product.	Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail.	Research current examples of the outcome for the unit.	Explore, develop, analyse and communicate aspects and technical features of their design proposals by modelling their ideas in a variety of ways.
	Model their ideas in card and paper.	Identify simple design criteria.	Plan the order of work before starting.	Evaluate products and identify criteria that can be used for their own designs.	Generate ideas through brainstorming and surveys and identify a purpose for their product.	Plan the order of their work, choosing appropriate materials, tools and techniques.
	Develop their design ideas applying findings from earlier research (including class surveys).	Make simple drawings and label parts.	Explore, develop and communicate design proposals by modelling and ideas (and collecting data).		Draw up a specification for their design.	
			Make drawings with labels when designing.		Develop a clear idea of what has to be done, planning and practising how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail.	
					Use results of investigations, information sources, including ICT when developing design ideas.	

Make	Make their design using appropriate techniques.	Follow design to make the focus item.	Follow design instructions to make final product.	Use design plan to guide the assembly of the product.	Bread	Select appropriate tools, materials, components and techniques.
	With help, measure, mark out, cut and shape a range of materials.	Begin to select tools and materials; use vocab to name and describe them.	Select tools and techniques for making their product.	Select appropriate tools and techniques for making their product.	Fashion & Textiles	Assemble components to make taster/working models.
	Use tools e.g. scissors and a hole punch safely.	Measure, cut and score with some accuracy.	Think about their ideas as they make progress and be willing change things if this helps them improve their work.	Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques.	Moving Toys	Follow designs and make modifications throughout the assembling process as necessary.
	Assemble, join and combine materials and components together using a variety of temporary methods (e.g. glues/masking tape) and representing a variety of techniques (e.g. wheel/slider mechanisms).	Use hand tools and equipment safely and appropriately. Assemble, join and combine materials in order to make a product.	Measure, mark out, cut, score and assemble components with more accuracy.	Join and combine materials, ingredients and components accurately in temporary and permanent ways.	Select appropriate materials, tools and techniques.	Use tools safely and accurately.
	Use simple finishing techniques to improve the appearance of their product.	Cut, shape and join fabric to make a simple product.	Use finishing techniques strengthen and improve the appearance of their product using a range of equipment (including ICT).	Measure, tape or pin, cut and join fabric with some accuracy.	Measure and mark out accurately.	Construct products using permanent joining techniques.
	Select and use appropriate fruit and vegetables, processes and tools.	Use basic sewing techniques.	Work safely and accurately with a range of simple tools, equipment and ingredients.	Sew using a range of different stitches, weave and knit.	Use skills in using different tools and equipment safely and accurately.	Achieve a quality finished product.
	Use basic food handling, hygienic	Choose and use appropriate finishing techniques.	Demonstrate hygienic food preparation and storage.	Follow the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens.	Pin, sew and stitch materials together create a product.	Weigh and measure accurately (time, dry ingredients, liquids).
		Follow safe procedures for food safety and hygiene.			Follow designs and make modifications throughout the assembling process as necessary.	Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens.
					Cut and join with accuracy to ensure a good-quality finish to the product.	
					Weigh and measure accurately (time, dry ingredients, liquids).	
				Apply the rules for basic food hygiene and other safe		

	practices and personal hygiene.			Follow instructions to weigh and measure ingredients.	practices e.g. hazards relating to the use of ovens.	
Evaluate	<p>Complete and share finished items.</p> <p>Evaluate their product by discussing how well it works in relation to the purpose.</p> <p>Evaluate their products as they are developed, identifying strengths and possible changes they might make.</p> <p>Evaluate their product by asking questions about what they have made and how they have gone about it.</p> <p>Complete games and activities linked to learning across the unit.</p>	<p>Complete and discuss a finished product.</p> <p>Evaluate against their design criteria.</p> <p>Evaluate their products as they are developed, identifying strengths and possible changes they might make.</p> <p>Talk about their ideas, saying what they like and dislike about them.</p>	<p>Present a finished product.</p> <p>Evaluate finished product against original design criteria e.g. how well it meets its intended purpose.</p> <p>Evaluate the 'make' process against the set criteria.</p> <p>Complete an end of unit quiz.</p>	<p>Present final product.</p> <p>Apply learning across the unit to complete final games and activities.</p> <p>Evaluate their work both during and at the end of the assignment.</p> <p>Evaluate their products carrying out appropriate tests.</p>	<p>Bread</p> <p>Fashion & Textiles</p> <p>Moving Toys</p> <p>Demonstrate final product.</p> <p>Evaluate a product against the original design specification and suggest changes to the design process for next time.</p> <p>Evaluate it personally and seek evaluation from others.</p>	<p>Test final product against design criteria.</p> <p>Evaluate final products, identifying strengths and areas for development, and carrying out appropriate tests.</p> <p>Record evaluations using drawings with labels.</p> <p>Evaluate against original criteria and suggest ways that the final product could be improved.</p>