

DT Progression – Cooking and Nutrition

	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		- use the basic principles of a healthy and varied diet to prepare dishes - understand where food comes from.		- 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.			
	To use ready-made ingredients and to learn how to handle food hygienically	To create a healthy pizza	To create a healthy coleslaw considering the 5 food groups	To prepare and cook paella	To bake bread	To design and make a scouse dish	To design and make a savoury Greek dish
		Talk about what he/she eats at home and begin to discuss what healthy foods are. Say where some food comes from and give examples of food that is grown.	Understand that all food has to be farmed, grown or caught. Understand the need for a variety of food in a diet.	Understand that food has to be grown, farmed or caught in Europe and the wider world. Talk about the different food groups and name food from each group.	Understand the main food groups and the different nutrients that are important for health.	Understand that seasons may affect the food available.	Understand how food is processed into ingredients that can be eaten or used in cooking.
Developing, planning and communicating ideas		Ask simple questions about existing products. Draw on own experience to help generate ideas Suggest ideas and explain what they are going to do Use pictures and words to create simple designs for a product.	Generate, develop, model and communicate ideas for a product through talking, drawing and annotating. Develop design ideas through discussion, observation, drawing and modelling Identify simple design criteria Make simple drawings and label parts	Identify a purpose and establish criteria for a successful product. Follow a recipe, using appropriate utensils and measuring skills. Make drawings with labels when designing Evaluate and consider flavours, spices and herbs.	Generate ideas, considering the purposes for which they are designing Follow a recipe, using appropriate utensils and measuring ingredients to the nearest gram accurately in order to prepare food. Make labelled drawings showing specific features	To design, create and refine a recipe applying knowledge of different materials, tools and techniques. Generate ideas through brainstorming and identify a purpose for a product. Draw up a specification for the design	Research and plan a savoury dish, applying his/her knowledge of ingredients. To design, create and refine a recipe that demonstrates a range of cooking techniques, applying previously learned skills Communicate ideas through detailed labelled drawings Create design using an exploded diagram.

Preparation, skills and processes:	Mixing, cutting, spooning.	To develop the skills of slicing, cutting, arranging, grating	To develop the skills of grating, slicing, peeling	To develop the skills of cutting, slicing, dicing, combining, mixing, grating, crushing.	To develop the skills of measuring, kneading, combining, shaping, whisking and baking.	To develop the skills of slicing, dicing, crushing and blending	
Finishing (heating and plating)	To observe adults using heat sources to cook e.g cakes in an oven.	To observe adults using heat sources to cook - pizza in an oven		To use a heat source with direct adult supervision	To use an oven with direct adult supervision	To use a heat source with distant adult supervision	To use a heat source with distant adult supervision
Evaluating		Evaluate their product by discussing how well it works in relation to the purpose	Explore and evaluate existing products Evaluate own products against design criteria.	Evaluate own ideas and products against design criteria.	Evaluate own ideas and products considering how well they meet the needs of the intended user how they might be improved.	Evaluate own work against their design criteria and consider the views of others to improve their work.	Evaluate and adapt own final work following feedback or discussion based on their preparatory ideas
Measuring:	Non-unit measuring cups		Measuring cups	Digital scales and measuring cups	Analogue scales and measuring cups	Analogue scales and scaling recipes up and down.	Analogue scales
Tools:	Nylon knife, mixing spoons, bowls.	Nylon knife and serrated knife	Pairing knife, grater (adult support), mixing spoons.	Vegetable knife – supported	Vegetable knife	Vegetable knife, peeler, blender, garlic press	Vegetable knife, lemon zester, garlic press, peeler, grater.
Key Vocabulary:		Key Vocabulary: <i>slice, cut, grate, arrange, texture, recipe</i>	Key Vocabulary: <i>fruit, vegetable, fats, dice, chop</i>	Key Vocabulary:	Key Vocabulary: <i>knead, score, dough, flavour, handle</i>	Key Vocabulary:	Key Vocabulary:

DT Progression – Textiles

	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			Puppets		Purses		Phone cases
Developing, planning and communicating ideas			Identify a purpose and establish criteria for a successful product. Generate, develop, model and communicate ideas for a product through talking, drawing and annotating. Develop their design ideas through discussion, observation, drawing and modelling Identify simple design criteria Make simple drawings and label parts		Identify a purpose and establish criteria for a successful product, considering its purpose and the user/s Explore, develop and communicate design proposals by modelling ideas Mock up template of product. Make drawings with labels when designing		Create and refine a design specification applying previously learned sewing techniques. Explore, develop and communicate aspects of their design proposals by modelling ideas in a variety of ways - discussion, annotated sketches, pattern pieces and computer-aided design. Communicate ideas through detailed labelled drawings Plan the order of work, choosing appropriate materials, tools and techniques
Make	Use a variety of textiles and fabrics Decorate a piece of fabric Use simple weaving techniques: paper, twigs and threading Make a fabric collage: layering fabric		Cut, shape and join fabric to make a simple garment. To understand how to thread a needle, and begin to do so with support To use a running stitch Begin to use an over stitch Design, mark and cut appliques with some accuracy (supported). To join appliques to final designs using the running stitch and glue Use language appropriate to the skill and technique being learnt		Design, plan and decorate a fabric piece using appliques Thread a needle independently Develop use of a running stitch / back stitch, applying it to increasingly complex forms Design, mark and cut appliques with increasingly accuracy To create simple templates independently and use them to mark and cut Use language appropriate to the skills and technique being learnt and previously learnt		Design, plan and decorate a fabric piece To pin multiple pieces of fabric together before sewing to create a product. Competently use running stitch / back stitch, applying it to increasingly complex forms. Experiment with a variety of techniques Consider a seam allowance when joining two separate pieces Cut and join with accuracy to ensure a good-quality finish to the product

Evaluating			Explore and evaluate existing products Evaluate own products against design criteria.		Evaluate own ideas and products against design criteria.		Evaluate and adapt own final work following feedback or discussion based on their preparatory ideas
Key Vocabulary:			Key Vocabulary: <i>hand puppet, running stitch, over stitch, joining technique, template, fabric</i>		Key Vocabulary: <i>stitch, fasten, applique, thread, back stitch, needle eye</i>		Key Vocabulary:

DT Progression –Structures

	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		To build structures, exploring how they can be made stronger, stiffer and more stable		To apply their understanding of how to strengthen, stiffen and reinforce more complex structures			
		Shelters		Bridges		Pencil Pots	
Developing, planning and communicating ideas		Ask simple questions about existing products. Draw on own experience to help generate ideas Suggest ideas and explain what they are going to do Use pictures and words to create simple designs for a product.		Explore the key ideas / techniques of Brunel and use his techniques in their own designs. Generate ideas, considering the purposes for which they are designing Design a stable structure that is able to support weight. Make labelled drawings showing specific features		Design a stable structure, with a focus on triangulation, which is aesthetically pleasing. Generate ideas through brainstorming and identify a purpose for a product. Draw up a specification for the design.	
	Uses their increasing knowledge and understanding of tools and materials to explore their interests and enquiries and develop their thinking EAD - CWM	Use a range of simple tools to cut, join and combine materials and components safely. Select from and use a range of tools and equipment to perform practical tasks e.g. cutting, shaping, joining and finishing. Know the names of tools, techniques.		Create and make a variety of free standing frame structures of different shapes and sizes. Select appropriate materials to build a strong structure. Reinforce corners to strengthen a structure.		Build more complex 3D structures independently making increasingly precise measurements and marking wood accurately. Use of CAD to create 2D/3D nets. Use of exploded diagram.	

		Explore how structures can be made stronger, stiffer and more stable		Use a hot glue gun safely to create their structure.		Select appropriate tools and equipment for particular tasks. Use the correct techniques to saw safely. Identify where a structure needs reinforcement and use triangulation as a strengthening technique.	
Evaluating		Evaluate their product by discussing how well it works in relation to the purpose		Evaluate own ideas and products considering how well they meet the needs of the intended user how they might be improved.		Evaluate own work against their design criteria and consider the views of others to improve their work.	
Key Vocabulary:		Key Vocabulary: <i>structure, stability, strength, material, joins, design</i>		Key Vocabulary: <i>suspension bridge, arch bridge, beam bridge, truss bridge, join, structure</i>		Key Vocabulary:	

DT Progression – Mechanisms including electrical systems

	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		To explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.		To 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.			
		Sliders and Levers Moving Picture	Wheels and Axles Moving Vehicle	Levers and Linkages Moving Picture	Electrical Systems Torches	Cams Pop-up Toy	Pulleys and Gears
Developing, planning and communicating ideas		Explore a range of simple mechanisms, understanding that levers and sliders are mechanisms and can make things move. Experiment with different materials to design and make products with	Explore the use of wheels and axles. Generate, develop, model and communicate ideas for a product through talking, drawing and annotating. Generate ideas by drawing on their own	Begin to develop an understanding that mechanical systems such as levers and linkages can create movement. Identify a purpose and establish criteria for a successful product.	Use knowledge of existing products to design a functional and appealing product using an electrical system. Use of Microbits to develop coding for the electrical system incorporating the control in DT.	To understand how mechanical systems such as cams create movement. Generate ideas through brainstorming and identify a purpose for their product	Develop a greater understanding of how cams, pulleys or gears create movement. Use research into famous designers and inventors to inform the design of own innovative products.

		sliders and levers. Ask simple questions about existing products. Identify whether a mechanism is a lever or slider and determine what movement the mechanism will make. Use pictures and words to create simple designs for a product. Draw on their own experience to help generate ideas Suggest ideas and explain what they are going to do	and other people's experiences Develop their design ideas through discussion, observation, drawing and modelling Identify simple design criteria Make simple drawings and label parts	Plan the order of their work before starting Explore, develop and communicate design proposals by modelling ideas Make drawings with labels when designing	Name and identify electrical components. Understand that a battery contains stored electricity and can be used to power products Understand that breaks in a circuit will stop it from working. Make labelled drawings from different views showing specific features Create designs using cross sectional diagrams. Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting ways of improving.	Use results of investigations, information sources, including ICT when developing design ideas. Draw up a specification for their design 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 Create prototypes to show his/her ideas.	Develop a design specification Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways Plan the order of their work, choosing appropriate materials, tools and techniques Communicate their ideas through detailed labelled drawings Design and make products with greater independence.
Making	begin to incorporate moving parts in to models. For example, use split pins to make body parts move.	Make simple sliders Make simple hinges Model ideas in card and paper Experiment with linkages adjusting, length. With help, measure, mark, cut and shape a range of products. Join and assemble materials and components together using a variety of temporary methods	To use axels and wheels to create simple movements Begin to select tools and materials; use correct vocabulary to name and describe them Join and assemble materials and components together using a variety of methods Make simple changes to their design as they make.	Use simple lever and linkages to create movement Make linkages using card for levers and split pins for pivots. Experiment with linkages adjusting the widths, lengths and thicknesses Cut and assemble components with increasing accuracy. Make appropriate changes to their design through equipment and materials as they make.	Use the key components used to create a functioning circuit. To make a shell structure. Measure, mark, cut and assemble with increasing accuracy. Use taught technical skills to adapt and improve own design. Select from and use a wider range of materials and components	Design and make a product that incorporates a cam mechanism. To use cams to create movement. Make careful and precise measurements so that joins, holes and openings are in exactly the right place. Select from and use a wider range of materials and components, including construction materials, according to their functional	Use cams, pulleys and gears to create movement Use finishing techniques to strengthen and improve the appearance of their product With independence, make careful and precise measurements so that joins, holes and openings are in exactly the right place.

		tape, PVA glue / glue sticks Develop design ideas applying findings from their earlier research				properties and aesthetic qualities.	
Evaluating		Evaluate their product by discussing how well it works in relation to the purpose Explain what he/she likes about the work of others.	Explore and evaluate existing products Evaluate own products against design criteria.	Evaluate own ideas and products against design criteria.	Evaluate own ideas and products considering how well they meet the needs of the intended user how they might be improved. Articulate how product could be improved using technical terms and reasons.	Evaluate own work against their design criteria and consider the views of others to improve their work.	Evaluate and adapt own final work following feedback or discussion based on their preparatory ideas
Key Vocabulary:		Key Vocabulary: <i>lever, slider, pivot, design, mechanism, fastener, moving picture</i>	Key Vocabulary: <i>wheel, axle, chassis, mechanism, vehicle</i>	Key Vocabulary:	Key Vocabulary: <i>electricity, circuit, insulator, conductor, battery, switch, component</i>	Key Vocabulary: <i>cam, mechanism, components, frame, structure, design criteria</i>	Key Vocabulary: