Progression in Design and Technology

Design and Technology Intent

At Laithes Primary school, using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Design and Technology prepares children to deal with tomorrow's rapidly changing world. It encourages children to become independent, creative problem solvers and thinkers as individuals and part of a team. It enables them to identify needs and opportunities and to respond to them by developing a range of ideas and by making products and systems. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. Design Technology is taught through topic lessons. DT lessons are planned carefully around the children's interests, providing opportunities for the development of skills and integration with other subjects.

When planning lessons, teachers should base intended learning outcomes/challenges on the assessment criteria for each subject and should share these with pupils.

Colour					
Area of study	Design	Make	Evaluate	Technical Knowledge	Cooking and Nutrition

Developing, Securing, Mastering explained:

Depth of Learning	Cognitive challenge	Nature of progress	Typically, pupils will	Predominant teaching style
Developing	Low level cognitive demand. Involves following instructions.	Acquiring	name, describe, follow instructions or methods, complete tasks, recall information, ask basic questions, use, match, report, measure, list, illustrate, label, recognise, tell, repeat, arrange, define, memorise.	Modelling Explaining
Securing	Higher level of cognitive demand. Involves mental processing beyond recall. Requires some degree of decision making.	Practising	apply skills to solve problems, explain methods, classify, infer, categorise, identify patterns, organise, modify, predict, interpret, summarise, make observations, estimate, compare.	Reminding Guiding
Mastering	Cognitive demands are complex and abstract. Involves problems with multi-steps or more than one possible answer.	Deepening Understanding	Requires justification of answers. solve non-routine problems, appraise, explain concepts, hypothesise, investigate, cite evidence, design, create, prove.	Coaching Mentoring

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		Foundation Stage	Year 1/2	Year 3/4	Year 5/6
Design	**Contexts, Uses and Purposes**	Pupils should be taught to: Explain what they are making and which materials they are using. Select materials from a limited range that will meet simple design criteria e.g. shiny. Select and name the tools needed to work the materials e.g. scissors for paper.	Pupils should be taught to: • 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	Pupils should be taught to: • 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	
		Describe simple models or drawings of ideas and intentions.	*State the purpose of the design and the intended user* *Explore materials, make templates and mock ups e.g. moving picture / lighthouse* *Y1* *Draw on their own experience to help generate ideas. Suggest ideas and explain what they are going to do. Identify a target group for what they intend to design and make.* *Y2* *Design products that have a clear purpose and an intended user. Make products, refining the design as work progresses. Use software to design. Start to generate ideas by drawing on their own and other people's experiences.*	*Gather information about the needs and wants of particular individuals and groups* *Develop their own design criteria and use these to inform their ideas* *Research designs*	*Carry out research, using surveys, interviews, questionnaires and web-based resources* *Identify the needs, wants, preferences and values of particular individuals and groups* *Develop a simple design specification to guide their thinking* *Recognise when their products have to fulfil conflicting requirements*
	Ideas	*Explore ideas by rearranging materials.*	*Generate own ideas for design by drawing on own experiences or from reading* *Y1* *Develop their design ideas applying findings from their earlier research.* *Y2* *Begin to develop their design ideas through discussion, observation, drawing and modelling. Identify a purpose for what they intend to design and make. Understand how to identify a target group for what they intend to design and make based on a design criteria.*	*Share and clarify ideas through discussion Model their ideas using prototypes and pattern pieces Use annotated sketches, cross-sectional drawings and diagrams Use computer-aided design* *Y3* *With growing confidence generate ideas for an item, considering its purpose and the user/s. Start to order the main stages of making a product. Identify a purpose and establish criteria for a successful product. Know to make drawings with labels when designing. When planning explain their choice of materials and components including function and aesthetics* *Y4* *Design with purpose by identifying opportunities to design. Make products by working efficiently (such as by carefully selecting materials). Use software to design and represent product designs*	*Generate innovative ideas, drawing on research Make design decisions, taking account of constraints such as time, resources and cost Develop prototypes* *Y5* *Start to generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and CAD.* *Begin to use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose.* *Draw up a specification for their design- link with Mathematics and Science.* *Use results of investigations, information sources, including ICT when developing design ideas.* *With growing confidence select appropriate materials, tools and techniques.* *Y6* *Design with the user in mind, motivated by the service a product will offer (rather than simply for profit).* *Use prototypes, cross-sectional diagrams, and computer aided designs to represent designs.*

Assessment criteria and KPIs		Year 1 *Can they use pictures and words to plan? Can they identify the key features of an existing product? • Can they think of some ideas of their own? • Can they plan an outcome through pictures with labels? • Can they explain their ideas orally?* **Year 2** *Can they think of ideas and plan what to do next? • Can they plan an innovative product? • Can they choose the most appropriate tools and materials? • Can they give a reason why these are best? • Can they describe their design by using pictures, diagrams, models and words?*	Year 3 *Can they plan their design, using accurate diagrams and labels? • Can they plan the equipment/tools needed and give reasons why? • Can they start to order the main stages of making their product? • Can they identify a design criteria and establish a purpose/audience for their product? • How realistic are their plans? e.g. tools, equipment, materials, components* **Year 4** *Can they create a final design for their product based on initial ideas and revisions, based on existing ideas? • Can they create a detailed plan considering their target audience, design criteria and intended purpose?*	Year 5 *Can they survey their target audience and use this to generate ideas? • Do they take a user's view into account when designing? • Can they produce a detailed step-by-step plan for their design method? • Can they suggest some alternative designs and compare the benefits and drawbacks to inform the design process and outcome?* **Year 6** *Can they use a range of information to inform their design? • Can they use market research to inform plans? • Can they work within constraints? • Can they follow and refine their plan if necessary? • Can they justify their plan to someone else? • Can they consider culture and society in their designs? • Have they considered the use of the product when selecting materials? • Have they thought about how their product could be marketed through packaging and advertising?*

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Make			Pupils should be taught to: • select from and use a range of tools and equipment to perform practical tasks [e.g. 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 characteristic	Pupils should be taught to: • select from and use a wider range of tools and equipment to perform practical tasks [e.g. 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	
	Planning	*Experience of using construction kits to build walls, towers, and frameworks.* *Experience of using of basic tools e.g. scissors or hole punches with construction materials e.g. plastic, card.* *Experience of different methods of joining card and paper.* *Joins construction pieces together to build and balance.* *Realises tools can be used for a purpose.* *Understands that different media can be combined to create new effects.* *Manipulates materials to achieve a planned effect.* *Constructs with a purpose in mind, using a variety of resources.* *Uses simple tools and techniques competently and appropriately.* *Selects appropriate resources and adapts work where necessary.*	*Select from a range of tools and equipment explaining their choices* *Select from a range of materials and components according to their characteristics* *Y1* *Model their ideas in card and paper.* *Mark out materials to be cut using a template.* *With help measure, mark out, cut and shape a range of materials.* *Explore using tools e.g. scissors and a hole punch safely.* *Selects tools and techniques needed to shape, assemble and join materials they are using.* *Y2* *Develop their ideas through talk and drawings and label parts.* *Make templates and mock ups of their ideas in card and paper or using ICT.*	*For instance:* *Select tools and equipment suitable for the task* *Explain their choice of tools and equipment in relation to the skills and techniques they will be using Select* *materials and components suitable for the task* *Explain their choice of materials and components according to functional properties and aesthetic qualities Order the main* *stages of making* *Produce detailed lists of tools, equipment and materials that they need*	
	Practical Skills and Techniques		*Follow procedures for safety* *Use and make own templates* *Measure, mark out, cut out and shape materials and components* *Assemble, join and combine materials and components* *Use simple fixing materials e.g. temporary – paper clips tape and permanent – glue, staples* *Use finishing techniques, including those from art and design* *Y1* *Make vehicles with construction kits which contain free running wheels.* *Cut materials safely using tools provided.* *Attach wheels to chassis on a model using an axle.* *With support cut strip wood/dowel using a hacksaw.* *Begin to assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape.* *Y2* *Cut materials safely using tools provided.* *Demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling).* *Demonstrate a range of joining techniques (such as gluing, hinges, or combining materials to strengthen).* *With help measure, cut and score to the nearest centimetre* *Learn to use hand tools safely and appropriately.* *Start to assemble, join and combine materials in order to make a product.*	*Follow procedures for safety* *Use a wider range of materials and components, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components*	
				Measure, mark out, cut and shape materials and components with some accuracy *Assemble, join and combine materials and components with some accuracy apply a range of finishing techniques, include those from art and design, with some accuracy* *Y3* *Measure and mark out accurately.* *Cut materials accurately and safely by selecting appropriate tools.* *Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs).* *Y4* *Cut materials accurately and safely by selecting appropriate tools.* *Measure and mark out to the nearest millimetre.* *Apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs).* *Create nets and select appropriate joining techniques.*	*Accurately measure to nearest mm, mark out, cut and shape materials and components* *Accurately assemble, join and combine materials/ components* *Accurately apply a range of finishing techniques, including those from art and design* *Use techniques that involve a number of steps Demonstrate resourcefulness, e.g. make refinements* *Y5* *Cut materials with precision.* *Cut accurately and safely to a marked line.* *Join/combine materials with temporary, fixed or moving joints.* *Use a glue gun with close supervision.* *Join materials using appropriate methods. Use hand drill to drill tight and loose fit holes.* *Y6* *Cut materials with precision and refine the finish with appropriate tools (such as sanding wood after cutting or a more precise scissor cut after roughly cutting out a shape).* *Show an understanding of the qualities of materials to choose appropriate tools to cut and shape (such as the nature of fabric may require sharper scissors than would be used to cut paper).* *Develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filling and sanding)*

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		Year 1 Can they explain what they are making? • Can they select appropriate resources and tools? • Can they explain which tools are they using? • Can they use tools safely? **Year 2** Can they join materials/ components together in different ways? • Can they measure materials to use in a model or structure? • Can they use joining, folding or rolling to make it stronger?	*Year 3* *Can they use equipment and tools accurately and safely? • Can they select the most appropriate materials, tools and techniques to use? • Can they manipulate materials using a range of tools and equipment? • Can they measure, cut and assemble with increasing accuracy?* *Year 4* *Can they use equipment and tools with increased accuracy and safety? • Can they select the most effective materials, tools and techniques to use? • Can they manipulate materials effectively using a range of tools and equipment? • Can they measure, cut and assemble accurately?*	*Year 5* *Can they choose appropriate tools and materials to ensure that the final product will appeal to the audience? • Can they use a range of tools and equipment with good accuracy and effectiveness, within established safety parameters?* *Year 6* *Can they choose appropriate tools and materials to ensure that the final product will appeal to the audience? • Can they use a range of tools and equipment with good accuracy and effectiveness, within established safety parameters?*

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Evaluate			Pupils should be taught to: • explore and evaluate a range of existing products • evaluate their ideas and products against design criteria	Pupils should be taught to: • 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	
	Own Ideas and Products	*Select materials from a limited range that will meet simple design criteria e.g.* shiny, smooth, stretchy *etc)* *Select and name the tools needed to work the materials e.g. scissors for paper.* *Select appropriate sizes of material for purpose.* *Use adhesives to join material.* *Discuss their work as it progresses.* *Discuss possible changes and improvements they would make in the future.*	*Talk about their design ideas and what they are making* *Make simple judgements about their products and ideas against design criteria* *Suggest how their products could be improved* *Evaluating products and components used .* **Y1** *Look and talk about what they have produced, describing simple techniques and media used.* **Y2** Evaluate *their work against their design criteria.* *Start to evaluate their products as they are developed, identifying strengths and possible changes they might make.* *With confidence talk about their ideas, saying what they like and dislike about them.*	*For instance:* *Identify the strengths and weaknesses of their ideas and products* *Consider the views of others, including intended users, to improve their work Refer back to* *their design criteria as they design and make* *Use their design criteria to evaluate their completed products*	
				Identify the strengths and weaknesses of their ideas and products *Consider the views of others, including intended users, to improve their work*	*Critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make* *Compare their ideas and products to their original* design specification
	Existing Products	*To operate simple equipment (programmable toys, remote controls, recordable devices).*	*For instance:* *Investigate - what products are, who they are for, how they are made and what materials are used* **Y1** *Use appropriate language to describe* colours, media, equipment, and textures. **Y2** *Look at a range of existing products explain what they like and dislike about products and why.*	*Investigate - how well products have been designed, how well products have been made, why materials have been chosen, what methods of construction have been used, how well products work, how well products achieve their purposes and how well products meet user needs and wants*	
				Investigate - who designed and made the products, where products were designed and made, when products were designed and made and whether products can be recycled or reused **Y3** *Understand how well products have been designed, made, what materials have been used and the construction technique.* *Learn about* inventors, designers, engineers, chefs and manufacturers *who have developed* ground-breaking *products.* *Start to understand whether products can be* recycled *or reused.* *Identify changes they might make or how their work could be developed further.* **Y4** *Refine work and techniques as work progresses, continually evaluating the product design.* *Choose suitable techniques to* construct *products or to* repair *items.*	*Investigate - how much products cost to make, how innovative products are and how sustainable the materials in products are* **Y5** *Start to understand how much products cost to make, how* sustainable *and* innovative *they are and the* impact *products have beyond their intended purpose.* *With growing confidence apply a range of* finishing techniques, *including those from art and design* **Y6** *Ensure products have a high quality finish, using art skills where appropriate.* *Make products through stages of* prototype*s, making continual* refinement*s.*
	Key Events/ Individuals			*For instance* *Identify great designers and their work and use research of designers to influence work*	

Assessment criteria and KPIs			
		Year 1 *Can they describe how their product works? • Can they identify success and next steps?*	**Year 3** *Start to think about their ideas as they make progress and be willing to make changes if this helps them to improve their work? • Can they assess how well their product works in relation to the purpose? • Can they explain what they changed which made their design even better?*
			Year 4 *Think about their ideas as they progress and make changes to improve their work? • Can they assess how well their product works in relation to the design criteria and the intended purpose? • Can they explain how they could improve their design and how their improvement would affect the original outcome?*
		Year 2 *Can they assess how well their product works? • If they did it again, can they explain what they would improve?*	**Year 5** *Can they continuously check that their design is effective and fit for purpose? • Can they assess how well their product works in relation to the design criteria and the intended purpose and suggest improvements? • Can they evaluate appearance and function against the original design criteria?*
			Year 6 *How well do they test and evaluate their final product? • Is it fit for purpose? • What would improve it? • Would different resources have improved their product? • Would they need more or different information to make it even better? • Does their product meet all design criteria?*

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Technical Knowledge			Pupils should be taught to: • build structures, exploring how they can be made stronger, stiffer and more stable • explore and use mechanisms [e.g. levers, sliders, wheels and axles], in their products	Pupils should be taught to: • apply their understanding of how to strengthen, stiffen and reinforce more complex structures • understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] • understand and use electrical systems in their products [e.g. series circuits incorporating switches, bulbs, buzzers and motors] • apply their understanding of computing to program, monitor and control their products	

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Technical Knowledge	**Making Products Work**	*Early experiences of working with paper and card to make simple flaps and hinges.* *Experience of simple cutting, shaping and joining skills using scissors, glue, paper fasteners, and masking tape.* *Assemble vehicles with moving wheels using construction kits- Lego and Kinects.* *Explores and uses ready-made mechanisms such as flaps, sliders, knobs, pulleys and levers.*	*For instance:* *Understand about the simple working characteristics of materials and components* *Understand about the movement of simple mechanisms including levers, sliders (Year 1) wheels and axles (Year 2)* *Understand that food ingredients should be combined according to their sensory characteristics* *Know the correct technical vocabulary for the projects they are undertaking* **Y1** *Begin to use simple finishing techniques to improve the appearance of their product.* **Y2** *Build structures, exploring how they can be made stronger, stiffer, and more stable.* *Create products using levers, wheels and winding mechanisms.* *Diagnose faults in battery operated devices (such as low battery, water damage, or battery terminal damage).*	*For instance:* *Understand how to use learning from science and maths to help design and make products that work Know that materials have both functional properties and aesthetic qualities* *Know that materials can be combined and mixed to create more useful characteristics Know that mechanical and electrical systems have an input, process and output* *Use the correct technical vocabulary for the projects they are undertaking*	

Year 3/4	Year 5/6
Understand how levers and linkages or pneumatic systems create movement *Understand how simple electrical circuits and components can be used to create functional products* *Understand how to program a computer to control their products* *Know how to make strong, stiff shell structures* *Know that a single fabric shape can be used to make a 3D textiles product* *Know that food ingredients can be fresh, pre-cooked and processed* **Y3** *Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys, and gears).* *Create series circuits.* *Know how simple electrical circuits and components can be used to create functional products.* *Start to understand that electrical systems have an input, process and output.* *Strengthen frames using diagonal struts.* **Y4** *Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and gears).* *Create series and parallel circuits.* *Strengthen materials using suitable techniques.* *Control and monitor models using software designed for this purpose.*	*Understand how cams, pulleys and gears create movement* *Understand how more complex electrical circuits and components can be used to create functional products* *Understand how to program a computer to monitor changes in the environment / control their products* *Know how to reinforce/strengthen a 3D framework* *Know that a 3D textiles product can be made from a combination of fabric shapes* *Know that a recipe can be adapted a by adding or substituting one or more ingredients* **Y5** *Control a model using an ICT control model.* *Use innovative combinations of electronics (or computing) and mechanics in product designs.* *Know how to write a simple program to control a product.* *Use the correct technical vocabulary for the project.* **Y6** *Create circuits using electronics kits that employ a number of components (such as LEDs, resistors, transistors and chips).* *Use innovative combinations of electronics (or computing) and mechanics in product designs.*

Year 1
Textiles
Can they describe how different textiles feel? • Can they make a product from textiles by gluing?
Mechanisms
• Can they make a product which moves? • Can they cut materials using scissors? • Can they describe the materials using different words? • Can they say why they have chosen moving parts?
Construction
• Can they arrange pieces of the construction before building? • Can they make a structure/model using different materials? • Can they make their model stronger if it needs to be?

Year 2
Textiles
• Can they measure an amount of a textile? • Can they join textiles together, using techniques such as stitching? • Can they cut textiles accurately? • Can they explain why they chose a certain textile?
Mechanisms • Can they join materials together as part of a moving product? • Can they explain how different parts move?
Construction • Can they make sensible choices as to which material to use for their constructions? • Can they make their structure stronger, stiffer or more stable?

Year 3
Textiles • Can they join textiles of different types in different ways? • Can they choose textiles both for their appearance and also qualities? • Can they begin to use a range of simple stitches?
Mechanisms • Can they make a product which uses mechanical components? • Can they use a range of components? e.g. levers, linkages and pneumatic systems
Construction • Can they join materials effectively to build a product? • Can they use a range of techniques to shape and mould? • Can they use finishing techniques? e.g. sanding, varnishing, glazing, etc • Can they work accurately to make cuts and holes?
Year 4
Textiles • Can they consider which materials are fit for purpose and join them appropriately? • Can they devise a template or pattern for their product?
Electrical and mechanical components • Can they use a simple circuit and add components to it? • Can they incorporate a switch into their product?
Construction • Can they measure accurately to build effective structures? • Can they use a range of advanced techniques to shape and mould? • Can they experiment with a range of techniques to increase stability in a structure? • Do they use finishing techniques, showing an awareness of audience?

Year 5
Textiles • Do they think what the user would want when choosing textiles? • How have they made their product attractive and strong? • Can they make up a prototype first?
Mechanical components • Can they refine their product after testing it? • Can they incorporate hydraulics and pneumatics?
Construction • Are their measurements accurate enough to ensure precision? • Can they demonstrate that their product is strong and fit for purpose? • Are they motivated enough to refine and further improve their product using mouldable materials?

Year 6
Textiles • Can they consider the audience when choosing textiles? • Can they make up a prototype first? • Can they use a range of joining techniques?
Electrical and mechanical components • Can they use different kinds of circuit in their product? • Can they think of ways in which adding a circuit would improve their product? • Can they make a product which uses both electrical and mechanical components?
Construction • Can they justify design in relation to the audience? • Do they ensure that their work is precise and accurate? • Can they justify why they selected specific materials? • Can they hide joints so as to improve the look of their product?

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Cooking and Nutrition	**Where Food Comes From**	*Begin to develop a food vocabulary using taste, smell, texture, and feel.*	Pupils should be taught to: • use the basic principles of a healthy and varied diet to prepare dishes • understand where food comes from	Pupils should be taught to: • 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	
			For instance: *Know where food comes from*	*For instance:* *Know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world* *Know that seasons may affect the food available* *Understand how food is processed into ingredients that can be eaten or used in cooking*	
	Food Preparation, Cooking and Nutrition	*Stir, spread, knead, and shape a range of food and ingredients.* *Begin to work safely and hygienically- children know to wash hands before touching and eating food.* *Measure and weigh food items, non-statutory measures e.g. spoons, cups.*	*Use appropriate equipment to weigh and measure ingredients* *Prepare simple dishes safely and hygienically, without using a heat sources* *Use techniques such as cutting* *Name and sort foods into the five groups of the 'eat well' plate* *Know that everyone should eat at least five portions of fruit and vegetables every day* *Y1* *Know how to prepare simple dishes safely and hygienically, without using a heat source such as a fruit salad.* *Know how to use techniques such as cutting, peeling, and grating with support from an adult.* *Y2* *Cut, peel, or grate ingredients safely, hygienically and give opportunities to do this independently.* *Measure or weigh using measuring cups or electronic scales.* *Assemble or cook ingredients such as baking.*	*How to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source* *How to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking*	
				Know that a healthy diet is made up from a variety and balance of different foods and drinks, as depicted in the 'eat well' plate *Know that to be active and healthy, food is needed to provide energy for the body* *Measure using grams Follow a recipe* *Y3* *Understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source.* *Begin to understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.* *Y4* *Prepare ingredients hygienically using appropriate utensils.* *Measure ingredients to the nearest gram accurately.* *Follow a recipe.* *Assemble or cook savoury dishes (controlling the temperature of the oven or hob, if cooking).* *Know how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading, and baking.*	*Know that recipes can be adapted to change the appearance, taste, texture and aroma* *Know that different foods contain different substances - nutrients, water and fibre - that are needed for health* *Understand the need for correct storage Measure accurately* *Work out ratios in recipes* *Y5* *Understand that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world.* *Understand how food is processed into ingredients that can be eaten or used in cooking.* *Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source* *Start to understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading, and baking.* *Y6* *Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms).* *Measure accurately and calculate ratios of ingredients to scale up or down from a recipe.* *Demonstrate a range of baking and cooking techniques, savoury and sweet dishes.* *Create and refine recipes, including ingredients, methods, cooking times and temperatures.*

Year 1

Can they cut food safely? • Can they describe the texture of foods? • Do they wash their hands and make sure that surfaces are clean? • Can they think of interesting ways of decorating food they have made, eg, cakes?

Year 2

Can they describe the properties of the ingredients they are using? • Can they explain what it means to be hygienic? • Are they hygienic in the kitchen?

Year 3

Can they choose the right ingredients for a product? • Can they use equipment safely? • Can they make sure that their product looks attractive? • Can they describe how their combined ingredients come together? • Can they set out to grow plants such as cress and herbs from seed with the intention of using them for their food product?

Year 4

Do they know what to do to be hygienic and safe? • Have they thought what they can do to present their product in an interesting way?

Year 5

Can they describe what they do to be both hygienic and safe? • How have they presented their product well?

Year 6

Can they explain how their product should be stored with reasons? • Can they set out to grow their own products with a view to making a salad, taking account of time required to grow different foods?