

Early Years Foundation Stage

	Early Years Foundation Stage	
	Nursery	Reception
Design Process	<ul style="list-style-type: none"> Discuss what a product does or needs to do Make to create an outcome. 	<ul style="list-style-type: none"> Discuss what a product does or needs to do Explore the qualities of a range of materials Make to create an outcome. Explain why they chose their materials. Explain what they have made.
Resistant Materials	<ul style="list-style-type: none"> Begin to cut and tear materials. Stick and glue materials together, with some success. Use junk objects to create their own designs. 	<ul style="list-style-type: none"> Begin to cut and tear materials. Stick and glue materials together. Use junk objects to create their own designs. Begin to consider how they join materials together.
Textiles	<ul style="list-style-type: none"> Thread beads onto a string with support. Notice that textiles are different to other materials used when making. 	<ul style="list-style-type: none"> Stick and decorate textiles with support. Thread beads onto a string. Begin to cut fabric using scissors.
Food & Nutrition	<ul style="list-style-type: none"> Mix pre-prepared ingredients with the support of an adult, safely and hygienically Understand that fruit and vegetables grow and where some are grown. 	<ul style="list-style-type: none"> Mix pre-prepared ingredients with some support, safely and hygienically Use a blunt knife to spread butter or jam (or alternative) on a cracker or bread. Understand that fruit and vegetables grow, and which ones are grown in the UK.
Products & Designers (Evaluation & Analysis)	<ul style="list-style-type: none"> Can say whether they like a product/design or not. Begin to identify materials used to make a product (e.g. plastic, metal, wood) 	<ul style="list-style-type: none"> Enjoy looking at different products and designs. Can say whether they like a product/design or not. Identify materials used to make a product (e.g. plastic, metal, wood)

Key Stage 1		
	Year 1	Year 2
Design Process	<ul style="list-style-type: none"> • Work from a basic brief to generate ideas and design a simple product. • Explore suitability of common materials before making a choice. • Show awareness of some products similar to their design. • Make a simple mock-up. • Make a final product. • Evaluate their final product - what went well? Did they follow the brief? 	<ul style="list-style-type: none"> • Work from a basic brief to generate ideas and design a simple product fit for purpose and audience. • Develop ideas, communicating and recording them in a suitable way (e.g. design book, design page, IT, mind map) • Make a simple mock-up. • Make a final product. • Evaluate their final product - what went well? Did they follow the brief?
Resistant Materials	<ul style="list-style-type: none"> • Follow basic procedures for safety. • Cut materials safely using scissors. • Tear, fold and curl materials. • Join using gluing and taping. • Create products based on a design. • Select materials and tools based on their properties. • Build structures, exploring how they can be made stronger, stiffer and more stable. 	<ul style="list-style-type: none"> • Follow basic procedures for safety. • Cut materials safely using scissors. • Tear, fold and curl materials. • Join using gluing and taping. • Begin to use a simple hinge. • Create products based on a design. • Select materials and tools based on their properties. • Explore and use simple mechanisms [e.g. levers, sliders, wheels and axles] in their products.
Textiles	<ul style="list-style-type: none"> • Cut textiles using scissors. • Decorate textiles using crayons, paint or sticking. • Join textiles using glue. • Create simple weaving using paper. 	<ul style="list-style-type: none"> • Cut textiles using scissors and a template. • Decorate textiles using crayons, paint or sticking. • Join textiles using glue. • Use a running stitch to join textiles using pre-prepared holes. • Create simple weaving using paper or large strips of fabric.
Food & Nutrition	<ul style="list-style-type: none"> • Cut soft foods safely using an appropriate tool. • Measure using measuring cups and spoons. • Assemble ingredients to make a simple recipe. • Discuss what a healthy and varied diet should look like. • Know where a range of fruits and vegetables come from. * 	<ul style="list-style-type: none"> • Cut soft foods safely and hygienically using an appropriate tool. • Measure using measuring cups and spoons. • Assemble ingredients to make a simple recipe. • Discuss what a healthy and varied diet should look like, naming and sorting using the five main groups. * • Know where a range of fruits and vegetables come from. *
Products & Designers (Evaluation & Analysis)	<ul style="list-style-type: none"> • Enjoy looking at different products and designs. • Can say whether they like a product/design or not. • Start to ask their own questions about a product or design. 	<ul style="list-style-type: none"> • Enjoy looking at different products and designs. • Can say whether they like a product/design or not. • Make a link between their work and a product. • Start to ask their own questions about a product or design.

Lower Key Stage 2

	Year 3	Year 4
Design Process	<ul style="list-style-type: none"> • Work from a brief to design an appealing, product fit for purpose and audience. • Explore some possible materials, conducting a simple test to ensure suitability before making a choice. • Show awareness of products similar to their own. • Develop an idea, communicating and recording it in a suitable way (e.g. annotated design page, diagrams, IT) • Create a final idea and translate this into a final product which fits the brief. • Evaluate their final product - what went well? Did they follow the brief? How could they improve their design? 	<ul style="list-style-type: none"> • Work from a brief to design an appealing, functional product fit for purpose and audience. • Perform basic tests, make simple prototypes/pattern pieces as appropriate. • Develop an idea, communicating and recording it in a suitable way (e.g. annotated design page, diagrams, IT) • Create a final idea and translate this into a final product which fits the brief. • Evaluate their final product - what went well? Did they follow the brief? How could they improve their design?
Resistant Materials	<ul style="list-style-type: none"> • Follow procedures for safety. • Cut, tear and shape materials • Use a wider range of joining methods (e.g. fasteners, tabs, flange) • Choose appropriate materials and tools for a product based on their functional properties. • Strengthen and stiffen a product using suitable materials. • Choose appropriate materials by testing their properties using a prototype. 	<ul style="list-style-type: none"> • Follow procedures for safety. • Cut, tear and shape materials with increasing accuracy. • Use a wider range of joining methods (e.g. fasteners, tabs, flange) • Choose appropriate materials and tools for a product based on their functional properties and aesthetics. • Strengthen, stiffen and reinforce a product using suitable materials. • Make mechanical /moving elements (e.g. pulleys, levers and linkages) • Choose appropriate materials by testing their properties using a prototype. • Incorporate a simple electrical system into their product.*
Textiles	<ul style="list-style-type: none"> • Cut textiles with scissors safely. • Thread a needle and tie a knot. (e.g. wool/embroidery needle) • Use a running stitch to join textiles. • Decorate textiles using stamping, printing. • Weave using a cardboard loom. 	<ul style="list-style-type: none"> • Cut textiles with scissors safely. • Thread a needle and tie a knot. (e.g. wool/embroidery needle) • Use a running stitch to join textiles. • Decorate textiles using stamping, printing and simple embellishment. • Weave using a cardboard loom or a circular template.
Food & Nutrition	<ul style="list-style-type: none"> • Cut a range of foods safely and hygienically with an appropriate tool. • Measure ingredients using scales or jugs (appropriate to mathematical level). • Follow recipes, starting to use techniques such as peeling, chopping, slicing, mixing. • Cook using a pan or oven safely (with supervision and support). • Know where a wider range of foods come from. • Discuss the importance of a range of varied and nutritious foods. * 	<ul style="list-style-type: none"> • Cut a range of foods safely and hygienically with an appropriate tool. • Measure ingredients using scales or jugs (appropriate to mathematical level). • Follow recipes, starting to use techniques such as peeling, chopping, slicing, mixing, spreading, baking or kneading. • Cook using a pan or oven safely (with supervision and support). • Know where a wider range of foods come from. • Discuss the importance of a range of varied and nutritious foods. * • Discuss the importance of a balanced diet to provide energy for a healthy active lifestyle. *

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<p>Products & Designers (Evaluation & Analysis)</p>	<ul style="list-style-type: none">• Continue to develop their knowledge of key designers and products.• Can express an opinion about a product.• Make simple comparisons between designers and products.• Discuss when and where a product or design was created.• Discuss: what products are; who they are for; how they are made and what materials are used.	<ul style="list-style-type: none">• Continue to develop their knowledge of key designers and products.• Can express an opinion about a product, giving simple reasons why.• Make links between their work and the work of a designer/maker.• Discuss when and where a product or design was created• Begin to make links between key events and individuals in design and technology that have helped shape the world.• Discuss: what products are; who they are for; how they are made and what materials are used.
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	Upper Key Stage 2	
	Year 5	Year 6
Design Process	<ul style="list-style-type: none"> • Work from a brief with a simple constraint (e.g. audience / purpose) to design an appealing, functional product. • Research a range of materials, conducting tests as appropriate before selecting the best choice. • Research products similar and different to their own to inform their own design. • Develop a design idea, communicating and recording it via a plan. • Test ideas using prototypes/creating pattern pieces. • Develop and make a final product, based on testing, which meets the brief criteria. • Evaluate their final product to assess their product against the brief and consider improvements. 	<ul style="list-style-type: none"> • Work from a brief with a simple constraint (e.g. audience / purpose) to design an appealing, functional product. • Research a range of materials, conducting tests as appropriate before selecting the best choice. • Research products similar and different to their own to inform their own design. • Develop a design idea, communicating and recording it via a plan and a labelled diagram. • Test ideas using prototypes/creating pattern pieces and where relevant computer aided design. • Evaluate their final product, including discussion amongst peers to assess their product against the brief and consider improvements.
Resistant Materials	<ul style="list-style-type: none"> • Follow procedures for safety with a wider range of tools and processes. • Cut and shape materials based on their design. • Choose appropriate tools and methods to cut and form a wider range of materials. • Choose appropriate materials by testing their properties using prototypes. • Use a wider range of joining methods (e.g. inserts, wrap, gusset, notch) • Use computing to program, monitor and control their products.* 	<ul style="list-style-type: none"> • Follow procedures for safety with a wider range of tools and processes. • Cut and shape materials based on their design with increasing accuracy. • Choose appropriate tools and methods to cut and form a wider range of materials. • Choose appropriate materials by testing their properties using prototypes, justifying their choices. • Make mechanical /moving elements (e.g. gears, cams and pneumatics) • Use a wider range of joining methods (e.g. inserts, wrap, gusset, notch) • Incorporate a more complex electrical system into their designs (e.g. more than one component / adding a switch). • Use computing to program, monitor and control their products.*
Textiles	<ul style="list-style-type: none"> • Use seam allowance and back stitch to join textiles to create a simple product (e.g. A cushion or soft toy). • Use a pattern/template to mark and cut fabric into a specific shape • Use cross stitch and running stitch. • Thread a needle and tie a knot, including finishing a thread and starting a new one within a project. • Choose appropriate materials for a textile product based on its use. • Sew a button or bead onto a project. 	<ul style="list-style-type: none"> • Use seam allowance and back stitch to join textiles to create a simple product (e.g. A cushion or soft toy). • Use a pattern/template to mark and cut fabric into a specific shape • Use filling stitch. • Use applique • Thread a needle and tie a knot, including finishing a thread and starting a new one within a project. • Choose appropriate materials for a textile product based on its use. • Weave using a variety of materials.
Food & Nutrition	<ul style="list-style-type: none"> • Measure ingredients with a degree of accuracy using an appropriate measuring device. • Design their own simple savoury recipes and test them. • Use a range of baking and cooking techniques with increasing confidence (e.g. boiling, frying, baking, grilling, steaming, roasting, microwaving) 	<ul style="list-style-type: none"> • Discuss why we need to store and handle food hygienically (micro-organisms).* • Measure ingredients with a degree of accuracy using an appropriate measuring device. • Scale recipes up or down accordingly. • Design their own simple savoury recipes and test them.

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Products & Designers (Evaluation & Analysis)	<ul style="list-style-type: none"> • Begin to explain why a recipe or meal is healthy or not, giving reasons based on their understanding.* 	<ul style="list-style-type: none"> • Use a range of baking and cooking techniques with increasing confidence (e.g. boiling, frying, baking, grilling, steaming, roasting, microwaving) • Begin to explain why a recipe or meal is healthy or not, giving reasons based on their understanding.*
Products & Designers (Evaluation & Analysis)	<ul style="list-style-type: none"> • Can discuss a range of key designers and products. • Express an opinion about a product, justifying reasons. • Make links between their work and the work of others, noting specific techniques. • Explore: how well products have been designed and made; why materials have been chosen; what methods of construction have been used; how well products achieve their purpose. 	<ul style="list-style-type: none"> • Can discuss a range of key designers and products. • Express an opinion about a product, justifying reasons. • Make links between their work and the work of others, noting specific influences and techniques. • Explore: how well products have been designed and made; why materials have been chosen; what methods of construction have been used; how well products achieve their purpose.