Design Technology Skills Progression EYFS & Key Stage 1			
	EYFS	**YEAR 1**	**YEAR 2**
Strand	**They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.**	**Design purposeful, functional, appealing products for themselves and other users based on design criteria.**	
	Skills	Skills	Skills
Designing	• Children use models, pictures and words to describe what they want to do and achieve. • Make suggestions and ask questions to extend children's ideas of what is possible, for example, "I wonder what would happen if…". • Support children in thinking about what they want to make, the processes that may be involved and the materials and resources they might need. • Constructs with a purpose in mind, using a variety of resources. • To build & apply a repertoire of knowledge, understanding & skills in order to design & make high quality proto-types & products for a wide range of users. Children can show they can create products for a use and purpose using their practical ideas. • To design products that solve problems within a variety of context, considering their own & others needs, wants & values. • Pupils begin to learn how to take risks becoming resourceful, innovative, enterprising & capable citizens.	**Designing – Understanding contexts, users and purposes** • Work confidently within a range of contexts, such as imaginary, story- based, home, school, gardens, playgrounds, local community, industry and the wider environment. • Use pictures and words to explain what they are designing & making. • Say whether their products are for themselves or other users. • Describe what their products are for. • Use simple design criteria to help develop their ideas. **Designing - Generating, developing, modelling and communicating ideas** • Generate ideas by drawing on their own experiences. • Use knowledge of existing ideas to help come up with ideas. • Develop and communicate ideas by talking and drawing. • Model ideas by exploring materials, components and construction kits and by making templates and mock-ups. • Use ICT, where appropriate, to develop and show their ideas.	**Designing – Understanding contexts, users and purposes** • Work within a range of contexts, such as imaginary, story- based, home, school, gardens, playgrounds, local community, industry and the wider environment. • State what products they are making. • Say whether their products are for themselves or other users. • Describe what their products are for. • State how their products will work with words and pictures. • Say how they will make their products suitable for their intended users. • Use simple design criteria to help develop their ideas. **Designing - Generating, developing, modelling and communicating ideas** • Generate ideas by drawing on their own experiences. • Use knowledge of existing products to help come up with ideas. • Develop and communicate ideas by talking and drawing. • Model ideas by exploring materials, components and construction kits and by making templates and mock-ups. • Use ICT, where appropriate, to develop and communicate their ideas

	EYFS	YEAR 1	YEAR 2
Strand	**They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.**	**Select from and use a range of tools and equipment to perform practical tasks such as cutting, shaping, joining and finishing.**	
Making	• **To build & apply a repertoire of knowledge, understanding & skills in order to make high quality proto-types & products for a wide range of users.** • **To make products that solve problems within a variety of context, considering their own & others needs, wants & values.** • **Begin to try out a range of tools and techniques safely.** • **Join construction pieces together to build and balance.** • **Realise tools can be used for a purpose.** • **Investigate various construction materials.** • **To handle tools, objects, construction and malleable materials safely and with increasing control.** • **Construct with a purpose in mind, using a variety of resources.** • **Selects tools and techniques needed to shape, assemble and join materials they are using.** • **Pupils begin to learn how to take risks, becoming resourceful, innovative & capable citizens.**	**Making - Planning** • Plan by suggesting what to do next. • Select tools and equipment. • Select appropriate materials and components. **Making – Practical skills and techniques** • With assistance, follow procedures for safety and hygiene. • Use a range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components. • With support, measure, mark out, cut and shape materials and components. • With support, assemble, join and combine materials and components.	**Making - Planning** • Plan by suggesting what to do next. • Select from a range of tools and equipment, explaining their choices. • Select from a range of materials and components according to their characteristics. **Making – Practical skills and techniques** • Follow procedures for safety and hygiene. • Use a range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components. • Measure, mark out, cut and shape materials and components. • Assemble, join and combine materials and components. • Use finishing techniques, including those from art and design.

	EYFS	YEAR 1	YEAR 2
Strand	**Explain own knowledge and understanding, and ask appropriate questions of others.**	**Explore and evaluate a range of existing products.**	
Evaluating	• Selects appropriate resources and adapts work where necessary. • Critique, evaluate and test their ideas and products and the work of others. • 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. • Talk about their own work & other people's in simple terms & describe how a product works.	**Evaluating – Own ideas and products** • Talk about their design ideas and what they are making. • Make simple judgements about their products and ideas against design criteria. • Say whether they like their design or not and why. **Evaluating – Existing products** • Explore what products are and who or what they are for. • Explore how products work and how or where they might be used. • Explore what materials products are made from. • Explore what they like and dislike about products.	**Evaluating – Own ideas and products** • 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 – Existing products** • Explore what products are and who or what they are for. • Explore how products work and how or where they might be used. • Explore what materials products are made from. • Explore what they like and dislike about products.
	EYFS	YEAR 1	YEAR 2
Strand	**To use what they have learnt about media & materials in original ways, thinking about issues & purposes**	**Build structures, exploring how they can be made stronger, stiffer and more stable.** **Explore and use mechanisms (eg: levers, sliders, wheels and axles), in their products.**	
Technical Knowledge	• Children can explain about what they are making and which tools they have used. • Children show and understanding of the need for safety when tackling new challenges and consider and manage some risks. • To practice some appropriate safety measures without direct supervision. • Investigate various construction materials. • Construct with a purpose in mind, using a variety of resources. • To develop creative, technical & practical expertise needed to perform everyday tasks confidently & to participate successfully in an increasingly technological world.	**Technical knowledge** **Making products work** • Know about the simple working characteristics of materials and components • how freestanding structures can be made stronger, stiffer and more stable. • Know that a 3-D textiles product can be assembled from two identical fabric shape. • Know that food ingredients should be combined according to their sensory characteristics. • Use the correct technical vocabulary for the projects they are undertaking	**Technical knowledge** **Making products work** • Know about the simple working characteristics of materials and components. • Know about the movement of simple mechanisms such as levers, sliders, wheels and axles. • Know how freestanding structures can be made stronger, stiffer and more stable. • Know that a 3-D textiles product can be assembled from two identical fabric shapes. • Know that food ingredients should be combined according to their sensory characteristics. • Use the correct technical vocabulary for the projects they are undertaking.

	EYFS	YEAR 1	YEAR 2
Strand	**Understand and apply the principles of nutrition and learn how to cook.**		
Cooking and Nutrition	• Manipulates materials to achieve a planned effect • Uses simple tools and techniques competently and appropriately. • Begin to understand where food comes from. • Begins to understand what a 'healthy diet' is.	**Cooking and nutrition – Where food comes from** • Understand that all food comes from plants or animals. • Understand that food comes from different places. **Cooking and nutrition – Food preparation, cooking and nutrition** • Name and group familiar foods e.g. vegetables and fruit • Understand how to prepare simple dishes safely and hygienically, without using a heat source. • Understands how to use techniques such as cutting, peeling and grating.	**Cooking and nutrition – Where food comes from** • Understand that all food comes from plants or animals. • Understand that food has to be farmed, grown elsewhere (e.g. home) or caught. **Cooking and nutrition – Food preparation, cooking and nutrition** • Know how to name and sort foods into the five groups in The Eat well Plate. • Understand that everyone should eat at least five portions of fruit and vegetables every day. • Understand how to prepare simple dishes safely and hygienically, without using a heat source. • Understands how to use techniques such as cutting, peeling and grating.

	Design Technology Skills Progression Key Stage 2			
	YEAR 3	**YEAR 4**	**YEAR 5**	**YEAR 6**
Strand	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			
	Skills	Skills	Skills	Skills
Designing	**Designing – Understanding contexts, users and purposes** • Work within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment. • Describe the purpose of their products. • Explain some design features of their products that will appeal to intended users. • Explain how particular parts of their products work. • Gather information about needs and wants of particular individuals and groups. • Within groups, develop their own design criteria and use these to inform their ideas. • Share and discuss ideas. **Designing - Generating, developing, modelling and communicating ideas** • Create prototypes and pattern pieces. • Use annotated sketches, cross-sectional drawings and exploded diagrams to communicate their ideas. • Think of ideas based on needs of user. • Make choices about which resources to use.	**Designing – Understanding contexts, users and purposes** • Work confidently within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment. • Describe the purpose of their products. • Indicate the design features of their products that will appeal to intended users. • Explain how particular parts of their products work. • Gather information about needs and wants of particular individuals and groups. • Develop their own design criteria and use these to inform their ideas. **Designing - Generating, developing, modelling and communicating ideas** • Share and clarify ideas through discussion. • Model their ideas using prototypes and pattern pieces. • Use annotated sketches, cross-sectional drawings and exploded diagrams to develop and communicate their ideas. • Use computer-aided design to develop and communicate their ideas. • Generate realistic ideas, focusing on the needs of the user. • Make design decisions that take account of the availability of resources.	**Designing – Understanding contexts, users and purposes** • Work within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment. • Describe the purpose of their products. • Explain how particular parts of their products work. • Carry out research, using surveys, questionnaires and web-based resources. • Identify the needs of particular individuals. • Develop a simple plan to guide thinking. • Share ideas through discussion. **Designing - Generating, developing, modelling and communicating ideas** • Model their ideas using prototypes/small models. • Use annotated sketches and exploded diagrams to develop and show their ideas. • Generate realistic ideas. • As a group, make design decisions that take account of the availability of resources.	**Designing – Understanding contexts, users and purposes** • Work confidently within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment. • Describe the purpose of their products. • Indicate the design features of their products that will appeal to intended users. • Explain how particular parts of their products work. • Carry out research, using surveys, interviews, questionnaires or web-based resources. • Identify the preferences and values of particular individuals and groups. • Develop a simple design specification to guide their thinking. • Share and clarify ideas through discussion. **Designing - Generating, developing, modelling and communicating ideas** • Model their ideas using prototypes and pattern pieces. • Use annotated sketches, cross-sectional drawings and exploded diagrams to develop and communicate their ideas. • Use computer-aided design to develop and communicate their ideas. • Generate realistic ideas, focusing on the needs of the user. • As an individual and group, make design decisions that take account of the availability of resources.

	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Strand	**Select from and use a wider range of tools and equipment to perform practical tasks (eg: cutting, shaping, joining and finishing), accurately.**			
Making	**Making - Planning** • Stools and equipment suitable for the task. • Select materials and components suitable for the task. • Order the main stages of making. • Follow procedures for safety and hygiene. • Use a wider range of materials and components than KS1, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components. **Making – Practical skills and techniques** • With support, 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, including those from art and design, with some accuracy.	**Making - Planning** • 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. **Making – Practical skills and techniques** • Follow procedures for safety and hygiene. • Use a wider range of materials and components than KS1, 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, including those from art and design, with some accuracy.	**Making - Planning** • With help, select tools and equipment suitable for the task. • Explain their choice of tools and equipment. • Select materials suitable for the task. • Explain their choice of materials according to aesthetic qualities. • Produce appropriate lists of tools, equipment and materials that they need. **Making – Practical skills and techniques** • Follow procedures for safety and hygiene. • Use a wider range of materials and components than KS1, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components. • Measure, mark out, cut and shape materials and components. • Assemble, join and combine materials and components. • Apply a range of finishing techniques, including those from art and design. • Demonstrate resourcefulness when tackling practical problems.	**Making - Planning** • 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. • Produce appropriate lists of tools, equipment and materials that they need. • Formulate step-by-step plans as a guide to making. **Making – Practical skills and techniques** • Follow procedures for safety and hygiene. • Use a wider range of materials and components than KS1, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components. • Accurately measure, mark out, cut and shape materials and components. • Accurately assemble, join and combine materials and components. • Accurately apply a range of finishing techniques, including those from art and design. • Use techniques that involve a number of steps. • Demonstrate resourcefulness when tackling practical problems.

	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Strand	**Investigate and analyse a range of existing products.**			
Evaluating	**Evaluating – Own ideas and products** • Identify the strengths and areas for development in their ideas and products. • Refer to their design criteria as they design and make. • Use their design criteria to evaluate their completed products. • How well products have been designed and made. **Evaluating – Existing products** Pupils will be taught to investigate and analyse • Explain why materials have been chosen. • Explain what methods of construction have been used. • Explain how well products work to achieve their purposes • Explain how well products meet user needs and wants. • Explain whether products can be recycled or reused. **Evaluating – Key events and individuals** • Beginning to have an awareness about inventors, designers, engineers, chefs and manufacturers who have developed ground breaking products.	**Evaluating – Own ideas and products** • Identify the strengths and areas for development in their ideas and products. • Consider the views of others, including intended users, to improve their work. • Refer to their design criteria as they design and make. • Use their design criteria to evaluate their completed products. **Evaluating – Existing products** Pupils will be taught to investigate and analyse: • how well products have been designed and made • why materials have been chosen • what methods of construction have been used developed ground-breaking products • how well products work to achieve their purposes • how well products meet user needs and wants who designed and made the products • where and when products were designed and made • whether products can be recycled or reused . **Evaluating – Key events and individuals** • Have a knowledge about inventors, designers, engineers, chefs and manufacturers who have developed ground breaking products.	**Evaluating – Own ideas and products** • Identify some of the strengths and areas for development in 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. • Evaluate their ideas and products against their original design specification. **Evaluating – Existing products** Pupils will be taught to investigate and analyse: • Identify how well products have been designed and made • Explain why some materials have been chosen • Explain some basic methods of construction that have been used • Explain how well products work to achieve their purposes • how much products cost to make • how sustainable materials in products are **Evaluating – Key events and individuals** • Discuss inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products	**Evaluating – Own ideas and products** • Identify the strengths and areas for development in theirs, and others, 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. • Evaluate their ideas and products against their original design specification. • Investigate & analyse a range of existing products against their own design criteria & consider the views of others to improve their work. **Evaluating – Existing products** Pupils will be taught to investigate and analyse: • How well products have been designed and made. • Why materials have been chosen. • What methods of construction have been used. • How well products work to achieve their purposes. • How well products meet user needs and wants. • How much products cost to make. • How innovative products are. • How sustainable the materials in products are. • What impact products have beyond their intended purpose. **Evaluating – Key events and individuals** • Have a knowledge about and be able to discuss inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products

	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Strand	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 [for example, series circuits incorporating switches, bulbs, buzzers and motors] Apply their understanding of computing to program, monitor and control their products.			
Technical Knowledge	**Technical knowledge – Making products work** • Understand how to use some learning from science and maths to help design. • Understand that materials have functional properties. • Understand that materials can be combined and mixed. • Understand that mechanical have an input, process and output. • Use some technical vocabulary for the projects they are undertaking. • Understand how mechanical systems such as levers create movement. • Understand how to program a computer to control their products. • Understand how to make strong, stiff shell structures. • Understand that a single fabric shape can be used to make a 3D textiles product. • Understand that food ingredients can be fresh, pre-cooked and processed.	**Technical knowledge – Making products work** • Understand how to use learning from science and maths to help design and make products that work. • Understand that materials have both functional properties and aesthetic qualities. • Understand that materials can be combined and mixed to create more useful characteristics. • Understand that mechanical and electrical systems have an input, process and output. • Use the correct technical vocabulary for the projects they are undertaking. • Understand how mechanical systems such as 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. • Understand how to make strong, stiff shell structures. • Understand that a single fabric shape can be used to make a 3D textiles product. • Understand that food ingredients can be fresh, pre-cooked and processed.	**Technical knowledge** **Making products work** • Use learning from science and maths to help design and make products that work • Understand that materials can be combined and mixed to create more useful characteristics. • Understand the mechanical and electrical systems have an input, process and output. • Use the correct technical vocabulary for the projects they are undertaking. • Know hoe mechanical systems such as cams or pulleys or gears create movement. • Know how to program a computer to monitor changes in the environment and control their products. • To know how to reinforce and strengthen a 3D framework. • To know that a 3D textiles product can be made form a combination of fabric shapes. • To understand that a recipe can be adapted by adding or substituting one or more ingredients.	**Technical knowledge – Making products work** • Use learning from science and maths to help design and make products that work • Understand that materials have both functional properties and aesthetic qualities. • Understand that materials can be combined and mixed to create more useful characteristics. • Understand that mechanical and electrical systems have an input, process and output. • Understand the correct technical vocabulary for the projects they are undertaking 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 and control their products. • Understand that a recipe can be adapted by adding or substituting one or more ingredients.

	YEAR 3	YEAR 4	YEAR 5	YEAR 6
Strand	**Understand and apply the principles of nutrition and learn how to cook.**			
Cooking and Nutrition	**Cooking and nutrition – Where food comes from** • Understand that some food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish). **Cooking and nutrition – Food preparation, cooking and nutrition** • Understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source. • To be able to attempt to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking • Understand that a healthy diet is made up from a variety and balance of different food and drink, as depicted in The Eat well Plate.	**Cooking and nutrition – Where food comes from** • 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 **Cooking and nutrition – Food preparation, cooking and nutrition** • Understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source. • Understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. • Understand that a healthy diet is made up from a variety and balance of different food and drink, as depicted in The Eatwell Plate. • Understand that to be active and healthy, food and drink are needed to provide energy for the body.	**Cooking and nutrition – Where food comes from** • Understand that all food comes from plants or animals. • Understand that food has to be farmed, grown elsewhere (e.g. home) or caught. **Cooking and nutrition – Food preparation, cooking and nutrition** • Understand how to name and sort foods into the five groups in The Eat well Plate. • Understands that everyone should eat at least five portions of fruit and vegetables every day. • Understand how to prepare simple dishes safely and hygienically, without using a heat source. • Understands how to use techniques such as cutting, peeling and grating.	**Cooking and nutrition – Where food comes from** • Understands 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 • Understands that seasons may affect the food available. • Understands how food is processed into ingredients that can be eaten or used in cooking. **Cooking and nutrition – Food preparation, cooking and nutrition** • Understands how to prepare and cook predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source. • Measure ingredients to the nearest gram and millilitre and calculate ratios for ingredients. • Confidently use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking, beating and rubbing. • Understands that recipes can be adapted to change the appearance, taste, texture and aroma. • Understands that different food and drink contain different substances – nutrients, water and fibre – that are needed for health.