Progression Map: D&T

Design: Understanding context and purpose						
Early Years	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Talk about features of the indoor and outdoor environment Know how a range of everyday products are used in the home and in school Begin to understand that some things are made for some people for some purposes	work confidently 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 designing and making say whether their products are for themselves or other users describe what their products are for say how their products will work say how they will make their products suitable for their intended users use simple design criteria to help develop their ideas	work confidently 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 designing and making say whether their products are for themselves or other users describe what their products are for say how their products will work say how they will make their products suitable for their intended users use simple design criteria to help develop their ideas	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 the needs and wants of particular individuals and groups develop their own design criteria and use these to inform their ideas	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 the needs and wants of particular individuals and groups develop their own design criteria and use these to inform their ideas	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 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	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 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

Design: Understanding the user						
Early Years	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Design products for users in the immediate environment: teddy bear, doll, a familiar story-book character, parent	Design products for known people & characters in the immediate and wider school environment: parents, teachers, classmates, familiar book characters, staff members across school		Design products to mee the needs of a wide range of users both familiar and unfamiliar, fictional and non-fictional Design products to meet the needs and preferences of groups of people Identify the needs of a diverse range of users including: age, gender, disability, neuro-diversity, region of the world			

Progression Map: D&T

Design: Generating, developing and communicating ideas						
Early Years	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Participate in small group, class and one-to-one discussions, offering their own ideas… and explanations for why things might happen (ELG – Speaking) Experiment with colour, design, texture, form and function (ELG – Creating with materials) Begin to represent ideas for making (eg what they are making, for who, and for what purpose) through talking and drawing. Begin to use the language of creating (eg make, plan, design, draw).	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 information and communication technology, where appropriate, to develop and communicate their 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 information and communication technology, where appropriate, to develop and communicate their 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 and sustainability of resources	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 and sustainability of resources	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 innovative ideas, drawing on research make design decisions, taking account of constraints such as time, resources (including whether they are recycled, re-used) and cost	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 innovative ideas, drawing on research make design decisions, taking account of constraints such as time, resources (including whether they are recycled, re-used) and cost
Make: Planning						
Early Years	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Think about the appearance, finish and texture of the product e.g. decorative effects used on a simple felt bag to suit the user.	plan by suggesting what to do next select from a range of tools and equipment, explaining their choices	plan by suggesting what to do next select from a range of tools and equipment, explaining their choices	select tools and equipment suitable for the task explain their choice of tools and equipment in relation to the skills and	select tools and equipment suitable for the task explain their choice of tools and equipment in relation to the skills and	select tools and equipment suitable for the task explain their choice of tools and equipment in relation to the skills and	select tools and equipment suitable for the task explain their choice of tools and equipment in relation to the skills and

Progression Map: D&T

physically arrange and re-arrange materials and components and orally communicate what they are doing and have done Begin to suggest what different materials may be most suitable for, based on their properties	select from a range of materials and components according to their characteristics	select from a range of materials and components according to their characteristics	techniques they will be using select materials and components suitable for the task explain their choice of materials and components according to functional properties, aesthetic qualities and sustainability order the main stages of making	techniques they will be using select materials and components suitable for the task explain their choice of materials and components according to functional properties, aesthetic qualities and sustainability order the main stages of making	techniques they will be using select materials and components suitable for the task explain their choice of materials and components according to functional properties, aesthetic qualities and sustainability produce appropriate lists of tools, equipment and materials that they need formulate step-by-step plans as a guide to making	techniques they will be using select materials and components suitable for the task explain their choice of materials and components according to functional properties, aesthetic qualities and sustainability produce appropriate lists of tools, equipment and materials that they need formulate step-by-step plans as a guide to making
Make: Practical skills and Techniques						
Early Years	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function (ELG – Creating with materials) Use a range of small tools, including scissors, paint brushes and cutlery (ELG – Fine motor skills) This could include: Construct their model/product with a simple purpose in mind.	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	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	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	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	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	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

Progression Map: D&T

Use simple tools and equipment to shape, assemble and join materials together. Experiment with different colours, designs, textures, forms and function during the making process. Mix ingredients using simple utensils. Follow basic food safety and hygiene procedures.	use finishing techniques, including those from art and design	use finishing techniques, including those from art and design	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	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	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	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
Evaluate: Own ideas and products						
Early Years	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Share their creations, explaining the process they have used (ELG – Creating with materials) This could include: Adapt ideas as they are making their model. Talk about how they made their model or creation. Talk about some of the features and what they like/dislike about their creation. Suggest one thing they might change when making a similar creation.	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	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	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	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	identify 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 as they design and make evaluate their ideas and products against their original design specification	identify 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 as they design and make evaluate their ideas and products against their original design specification

Progression Map: D&T

Evaluate: Existing products						
Early Years	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Know how a range of everyday products are used in the home and in school Think about the appearance, finish and texture of the product e.g. decorative effects used on a simple felt bag to suit the user. Begin to explore where materials come from e.g. wood from trees Sort rubbish into recycling bins	Know: - what products are - who products are for - what products are for - how products work - how products are used - where products might be used - what materials products are made from - what they like and dislike about products Sort rubbish into recycling bins	Know: - what products are - who products are for - what products are for - how products work - how products are used - where products might be used - what materials products are made from - what they like and dislike about products Sort rubbish into recycling bins	Investigate and analyse: - 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 - how well products meet user needs and wants Investigate and analyse: - who designed and made the products - where products were designed and made - when products were designed and made - whether products can be recycled or reused	Investigate and analyse: - 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 - how well products meet user needs and wants Investigate and analyse: - who designed and made the products - where products were designed and made - when products were designed and made - whether products can be recycled or reused	Investigate and analyse: - 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 - how well products meet user needs and wants Investigate and analyse: - 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	Investigate and analyse: - 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 - how well products meet user needs and wants Investigate and analyse: - 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
Evaluate: Key events and individuals						
Early Years	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			Learn about inventors, designers, engineers, chefs and manufacturers who have developed ground- breaking products			
Technical Knowledge						
Early Years	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Explore and handle materials with different properties e.g. opaque,	Know about the simple working characteristics of	Know about the simple working characteristics of	Know how to use learning from science to help	Know how to use learning from science to help	Know how to use learning from science to help	Know how to use learning from science to help

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translucent and transparent plastics, magnetic and non-magnetic metals, stretchy, rough, smooth and soft fabrics Begin to suggest what different materials may be most suitable for, based on their properties	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 Know the correct technical vocabulary for the projects they are undertaking	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 Know the correct technical vocabulary for the projects they are undertaking	design and make products that work Know how to use learning from mathematics 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 Know the correct technical vocabulary for the projects they are undertaking Know how mechanical systems such as levers and linkages or pneumatic systems create movement Know how simple electrical circuits and components can be used to create functional products Know how to program a computer to control their products Know how to make strong, stiff shell structures	design and make products that work Know how to use learning from mathematics 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 Know the correct technical vocabulary for the projects they are undertaking Know how mechanical systems such as levers and linkages or pneumatic systems create movement Know how simple electrical circuits and components can be used to create functional products Know how to program a computer to control their products Know how to make strong, stiff shell structures	design and make products that work Know how to use learning from mathematics 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 Know the correct technical vocabulary for the projects they are undertaking Know how mechanical systems such as cams or pulleys or gears create movement Know how more complex electrical circuits and components can be used to create functional products Know how to program a computer to monitor changes in the environment and control their products	design and make products that work Know how to use learning from mathematics 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 Know the correct technical vocabulary for the projects they are undertaking Know how mechanical systems such as cams or pulleys or gears create movement Know how more complex electrical circuits and components can be used to create functional products Know how to program a computer to monitor changes in the environment and control their products

Progression Map: D&T

			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	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	Know how to reinforce and strengthen a 3D framework including: diagonal structures, strut, tension and compression Know that a 3D textiles product can be made from a combination of fabric shapes Know that a recipe can be adapted by adding or substituting one or more ingredients	Know how to reinforce and strengthen a 3D framework including: diagonal structures, strut, tension and compression Know that a 3D textiles product can be made from a combination of fabric shapes Know that a recipe can be adapted by adding or substituting one or more ingredients
Cooking and Nutrition: Where food comes from						
Early Years	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Begin to know that all food comes from plants or animals	Know that all food comes from plants or animals Know that food has to be farmed, grown elsewhere (e.g. home) or caught	Know that all food comes from plants or animals Know that food has to be farmed, grown elsewhere (e.g. home) or caught	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 Begin to understand that food sources are dependent on weather seasons	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 Begin to understand that food sources are dependent on weather seasons	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 Know how food is processed into ingredients that can be eaten or used in cooking Know that climate change and human activity such as overfishing is having an impact on the food available	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 Know how food is processed into ingredients that can be eaten or used in cooking Know that climate change and human activity such as overfishing is having an impact on the food available

Progression Map: D&T

Cooking and Nutrition: Preparation, cooking and nutrition						
Early Years	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Know that fruit and vegetables are healthy Mix ingredients using simple utensils Follow basic food safety and hygiene procedures	Know how to name and sort foods into the five groups in the Eatwell Guide Know that everyone should eat at least five portions of fruit and vegetables every day Know how to prepare simple dishes safely and hygienically, without using a heat source Know how to use techniques such as cutting, peeling and grating	Know how to name and sort foods into the five groups in the Eatwell Guide Know that everyone should eat at least five portions of fruit and vegetables every day Know how to prepare simple dishes safely and hygienically, without using a heat source Know how to use techniques such as cutting, peeling and grating	Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source Know how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading Know that a healthy diet is made up from a variety and balance of different food and drink, as depicted in the Eatwell Guide Know that to be active and healthy, food and drink are needed to provide energy for the body	Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source Know how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading Know that a healthy diet is made up from a variety and balance of different food and drink, as depicted in the Eatwell Guide Know that to be active and healthy, food and drink are needed to provide energy for the body	Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source 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 food and drink contain different substances – nutrients, water and fibre – that are needed for health	Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source 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 food and drink contain different substances – nutrients, water and fibre – that are needed for health