

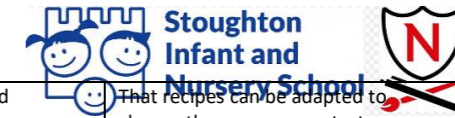
DT Progression Map

		Nursery	Reception	Year 1 Bread Freestanding shelter Moving picture	Year 2 Pizza Puppet Vehicle	Year 3 Pneumatics Shadow Puppets	Year 4 Torches Moving pictures	Year 5 Electrical buggies Crumble	Year 6 Cams Tinker-cad
Designing	Understanding contexts, users and purposes	Understand a question or instruction that has 2 parts Understand 'why' questions	Articulate their ideas and thoughts in well-formed sentences. Connect one idea or action to another using a range of connectives.	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	Begin to find out information about the needs and wants of particular individuals and groups Indicate the design features of their products that will appeal to intended users	Gather information about the needs and wants of particular individuals and groups Develop their own design criteria and use these to inform their ideas	Identify the needs, wants, preferences and values of particular individuals and groups Develop a simple design specification to guide their thinking	Carry out research, using surveys, interviews, questionnaires and web-based resources Indicate the design features of their products that will appeal to intended users	
	Generating, developing, modelling and communicating ideas	Develop their communication but may continue to have problems with irregular tenses and plurals Explore different materials freely, to develop their ideas about how to use them and what to make. Develop their own ideas and then decide which materials to use to express them Talk about and explore 2d and 3d shapes Make comparisons between objects relating to size, length, weight and capacity	Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen Return to and build on their previous learning, refining ideas and developing their ability to represent them. Create collaboratively, sharing ideas, resources and skills.	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	Explain how particular parts of their products work Use annotated sketches, to develop and communicate their idea	Generate realistic ideas, focusing on the needs of the user Use cross-sectional drawings and exploded diagrams to develop and communicate their ideas Make design decisions that take account of the availability of resources	Make design decisions, taking account of constraints such as time, resources and cost	Use computer-aided design to develop and communicate their ideas	
Making	Planning	Use longer sentences of 4 to 6 words Use talk to organise themselves and their play Choose the right resources to carry out their own Plan. Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'	Explore, use and refine a variety of artistic effects to express ideas and feelings.	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	With some support, order the main stages of making Select tools and equipment suitable for the task from a given selection Select materials and components suitable for the task from a given selection	Select tools and equipment suitable for the task Select materials and components suitable for the task Order the main stages of making	Produce appropriate lists of tools, equipment and materials that they need Formulate step-by-step plans as a guide to making Select materials and components suitable for the task	Explain their choice of tools and equipment in relation to the skills and techniques they will be using Explain their choice of materials and components according to functional properties and aesthetic qualities	
	Practical skills and techniques	Make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park.	Develop small motor skills so that they can use a range of tools competently, safely and confidently.	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	Measure, mark out, cut and shape materials and components with some accuracy Assemble, join and combine materials and components with some accuracy	Accurately measure, mark out, cut and shape materials and components	Accurately assemble, join and combine materials and components	

DT Progression Map

		<p>Join different materials and explore different textures.</p> <p>Select and use activities and resources, with help when needed</p> <p>Use one-handed tools and equipment</p> <p>Use a comfortable grip with good control when holding pens and pencils</p> <p>Select shapes appropriately: flat surfaces for building, a triangular prism for a roof, etc.</p> <p>Combine shapes to make new ones – an arch, a bigger triangle, etc.</p>	<p><i>ELG: Creating with materials> Safely use and explore a variety of Materials, tools and techniques, experimenting with colour, design, Texture, form and function.</i></p> <p><i>ELG: Fine Motor Skills> Use a range of small tools, including scissors, paint brushes and cutlery.</i></p>	<p>Measure, mark out, cut and shape materials and components</p> <p>Assemble, join and combine materials and components</p> <p>Use finishing techniques, including those from art and design</p>	<p>Apply a range of finishing techniques, including those from art and design</p>	<p>Apply a range of finishing techniques, including those from art and design, with some accuracy</p>	<p>Accurately apply a range of finishing techniques, including those from art and design</p> <p>Use techniques that involve a number of steps</p> <p>Demonstrate resourcefulness when tackling practical problems</p>	
Evaluating	Own ideas and products	<p>Be able to express a point of view and to debate when they disagree with an adult or a friend, using words as well as actions</p>	<p><i>ELG: Creating with materials> Share their creations, explaining the Process they have used.</i></p>	<p>Talk about their design ideas and what they are making</p> <p>Make simple judgements about their products and ideas against design criteria</p> <p>Suggest how their products could be improved</p>	<p>Use their design criteria to evaluate their completed products</p> <p>Identify the strengths and areas for development in their ideas and products</p>	<p>Refer to their design criteria as they design and make</p> <p>Consider the views of others, including intended users, to improve their work</p>	<p>Critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make</p> <p>Evaluate their ideas and products against their original design specification</p>	<p>Consider the views of others, including intended users, to improve their work</p>
	Existing products	<p>Explore how things work</p> <p>Explore and talk about different forces they can feel</p> <p>Talk about the differences between materials and changes they notice</p> <p>Use all their senses in hands-on exploration of natural materials</p> <p>Explore collections of materials with similar or different properties</p> <p>Talk about what they see, using a wide vocabulary</p>	<p><i>ELG: Speaking> Participate in small group, class and One-to-one discussions, offering their own ideas, using Recently introduced vocabulary.</i></p> <p><i>ELG: Speaking> Offer explanations for why things might happen.</i></p>	<p>Across KS1 pupils should explore:</p> <p>What products are</p> <p>Who products are for</p> <p>What products are for</p> <p>How products work</p> <p>How products are used</p> <p>Where products might be used</p> <p>What materials products are made from</p> <p>What they like and dislike about products</p>		<p>Who designed and made the products</p> <p>Where products were designed and made</p> <p>When products were designed and made</p> <p>Whether products can be recycled or reused</p>	<p>How much products cost to make</p> <p>How innovative products are</p> <p>How sustainable the materials in products are</p> <p>What impact products have beyond their intended purpose</p>	
Technical Knowledge	Making products work	<p>Match their developing physical skills to tasks and activities in the setting</p> <p>Choose the right resources to carry out their own plan</p> <p>Collaborate with others to manage large items</p>	<p><i>ELG: Creating with materials> Safely use and explore a variety of Materials, tools and techniques, experimenting with colour, design, Texture, form and function.</i></p>	<p>About the simple working characteristics of materials and components</p> <p>About the movement of simple mechanisms such as levers, sliders, wheels and axles</p> <p>How freestanding structures can be made stronger, stiffer and more stable</p> <p>That a 3-D textiles product can be assembled from two identical fabric shapes</p> <p>That food ingredients should be combined according to their sensory characteristics</p> <p>The correct technical vocabulary for the projects they are undertaking</p>	<p>How mechanical systems such as linkages and pneumatic systems create movement</p> <p>With some support use learning from science to help design and make products that work</p>	<p>How simple electrical circuits and components can be used to create functional products</p> <p>Use learning from science to help design and make products that work</p>	<p>How mechanical systems such as cams or pulleys or gears create movement</p> <p>How to program a computer to monitor</p> <p>Changes in the environment and control their products</p>	<p>How more complex electrical circuits and components can be used to create functional products</p> <p>How to reinforce and strengthen a 3D framework</p> <p>That mechanical and electrical systems have an input, process and output</p>
	Where food comes from	<p>Use a wider range of vocabulary</p>	<p>Learn new vocabulary</p> <p>Use new vocabulary throughout the day.</p>	<p>That all food comes from plants or animals</p> <p>That food has to be farmed, grown elsewhere (e.g. Home) or caught</p>			<p>That seasons may affect the food available</p> <p>How food is processed into ingredients that can be eaten or used in cooking</p>	<p>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</p>

DT Progression Map



<p>Cooking and nutrition</p>	<p>Food preparation, cooking and nutrition</p>	<p>Be increasingly independent in meeting their own care needs, for example, brushing teeth, using the toilet, washing and drying their hands thoroughly</p> <p>Make healthy choices about food, drink, activity and toothbrushing</p>	<p>Know and talk about the different factors that support their overall health and wellbeing: healthy eating.</p> <p>Explore the natural world around them.</p> <p><i>ELG: The Natural World>Explore the natural world around them, Making observations and drawing pictures of animals and plants.</i></p> <p><i>ELG: Managing self> Manage their own basic hygiene and Personal needs, including... Understanding the importance Of healthy food choices.</i></p>	<p>How to name and sort foods into the five groups in The Eatwell plate</p> <p>That everyone should eat at least five portions of fruit and vegetables every day</p> <p>How to prepare simple dishes safely and hygienically, without using a heat source</p> <p>How to use techniques such as cutting, peeling and grating</p>	<p>That a healthy diet is made up from a variety and balance of different food and drink, as depicted in the eat well plate</p> <p>That to be active and healthy, food and drink are needed to provide energy for the body</p> <p>That food ingredients can be fresh, pre-cooked and processed</p>	<p>That foods can be consumed in different ways</p> <p>How to adapt recipes to make better choices for your health and balanced diet</p> <p>To create a variety of dishes using core ingredients for a balanced meal</p>	<p>That recipes can be adapted to change the appearance, taste, texture and aroma</p> <p>That different food and drink contain different substances – nutrients, water and fibre – that are needed for health</p> <p>That a recipe can be adapted by adding or substituting one or more ingredients</p>	<p>To use previously taught knowledge on balanced diets, healthy meals to create a dish suited to an audience or meal time</p> <p>How to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source</p> <p>How to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking</p>	
<p>Vocabulary</p>		<p>Food Fruit Vegetable Taste Nutrients Texture Appearance Healthy Chop Claw Bridge Spread Weigh</p> <p>Structures Freestanding structure Stability Buttress</p> <p>Mechanisms Wheel Body Joining Winding</p>	<p>Food Fruit Vegetable Nutrients Taste Texture Appearance Healthy Chop Claw Bridge Spread Weigh</p> <p>Structures Freestanding structure Stability Buttress</p> <p>Mechanisms Axle Wheel Body Joining</p>	<p>Food Hygiene Healthy and safety Eatwell plate Dough Knead Prove Unleavened Yeast Weigh</p> <p>Structures Freestanding structure Stability Joining Buttress Strengthen Support Rigidity Brick bonding Prototype</p> <p>Mechanisms – sliders and levers Card strip Slot Slider Pivot Movement</p>	<p>Mechanisms – wheels and axles Axle Wheel Body Chassis Fixed/free mechanism</p> <p>Food Hygiene Health and safety Eatwell plate Balanced/healthy diet Five food groups – fruit and veg, carbohydrate, protein, dairy, fat and sugar Topping Chop Grate Spread Claw Bridge</p> <p>Textiles – templates and joining techniques Joining Techniques Template Pattern pieces Sew Running stitch Back stitch Over stitch</p>	<p>Design features Product Use Tools Equipment Materials Components Measure mark out cut shape join combine technique mechanical systems linkages pneumatic systems movement</p> <p>Healthy diet Variety Balance eat well plate</p> <p>Active Healthy energy</p> <p>Ingredients pre-cooked processed</p>	<p>Research Develop design criteria design ideas user cross-sectional drawings, exploded diagrams communicate design decisions resources, tools equipment suitability material components Measure mark out cut shape materials components</p> <p>Assemble Join Combine Accuracy design criteria evaluate</p>	<p>Identify Preference design specification purpose plan tools equipment materials components measure techniques finishing techniques critically evaluate</p> <p>Seasonal pre-cooked processed food adaptation substitutions ingredients appearance texture taste aroma</p>	<p>Research Surveys Interviews Questionnaires web-based resources design features products appeal intended users computer aided design communication materials tools equipment techniques components functional properties aesthetic qualities end user evaluate electrical circuits input process output</p>