

Anston Greenlands Skills Progression Document – Design and Technology

Early Years - Design Technology is covered throughout the year through weekly themes taken from the interests of the children. A weekly hook sheet is published, and DT work can be identified on it. Weekly enhanced provision is planned to ensure the children have the opportunity to explore designing and making skills independently throughout the week.

Year Group	Designing	Making	Evaluating	Cooking & Nutrition	Knowledge and Vocabulary
FS2	<p>Can use their senses to explore and describe the features of objects & buildings in the home, school, gardens and playgrounds, the local community and the wider environment.</p> <p>Begin to create simple designs to follow and label these.</p> <p>Begin to show accuracy when drawing simple designs and pictures of things they plan to make.</p> <p>Can make something with a clear intention – (generate own ideas)</p> <p><i>(Equality of opportunity, inclusion, diversity and Cultural Capital – Design and make artefacts linked to festivals – e.g. Diwa lamps).</i></p>	<p>Can create models independently and collaboratively, sharing ideas, resources and skills.</p> <p>Can make something and give meaning to it.</p> <p>Can select appropriate tools needed.</p> <p>Can use a range of tools competently, safely and confidently – such as scissors, pencils, and paintbrushes.</p> <p>Can join items in a variety of ways – Sellotape, masking tape, string, ribbon, and different types of glue.</p> <p>Can build models which replicate those in real life, using a variety of resources – For example – when using construction sets.</p>	<p>Can identify ways to overcome problems and improve their models (scrunch, twist, fold, bend, roll)</p> <p>Can talk about their models to others – talking about their process and highlighting their successes.</p> <p>Can talk about what they would do next time (new strategies).</p>	<p>Can talk about healthy eating.</p> <p>Can sort healthy and unhealthy foods into groups.</p> <p>Can use a range of tools competently, safely and confidently when baking/ preparing food – such as, knives, forks and spoons.</p> <p><i>(Equality of opportunity, inclusion, diversity and Cultural Capital – cook food linked to a range of festivals – e.g. Chinese New Year).</i></p>	<p><u>Knowledge</u></p> <p>Know the names of different buildings/places in their community.</p> <p>Know that tools are used for different purposes and these need to be used safely.</p> <p>Know that once a model has been created we can evaluate it to try and improve and develop it.</p> <p>Know that we need to eat healthy foods to support our overall health and wellbeing.</p> <p>Know that there are different joining techniques when creating models.</p> <p>Know that you can plan what you want to make by drawing/creating a design to follow.</p>

Year Group	Designing	Making	Evaluating	Cooking & Nutrition	Knowledge and Vocabulary
Yr 1/2	<p>Begin to draw upon their own experiences and use their imagination to generate ideas.</p> <p>Can develop and model their ideas through drawing, templates, mock-ups and, where appropriate, information and communication technology.</p> <p>Can talk about what products they are designing and planning to make, and who they are for – For example – themselves or others.</p> <p>Can design a simple appealing product based on specific criteria.</p> <p>Can label their designs.</p> <p>Can describe the purpose of their product to others.</p> <p>Can use ICT where appropriate to develop and communicate their ideas.</p>	<p>Can follow simple instructions to make a chosen design.</p> <p>Can select the appropriate tool from a range, and use these safely, explaining their choices.</p> <p>Can select appropriate materials and components from the range selected provided.</p> <p>Can use a range of materials and components, including construction materials, kits, textiles and mechanical components.</p> <p>Can measure, mark out, cut and shape with some accuracy.</p> <p>Can build structures, exploring how they can be made stronger, stiffer and more stable.</p> <p>Can explore and use mechanisms – For example - levers, sliders, wheels and axels.</p> <p>Can assemble and join materials and components</p>	<p>Can talk about what products are, how they work and who they are for.</p> <p>Can explore and evaluate a range of existing products. mainly through discussions, comparisons and simple written evaluations.</p> <p>Can evaluate their product against a specific design criteria, make suggestions for improvement, make changes where necessary.</p> <p>Can use an evaluation sheet to evaluate their design.</p>	<p>Can draw a supply food chain.</p> <p>Can explain how food is transported to shops.</p> <p>Can sort a variety of foods into different categories (plants or animals, farm to fork and not, perishables and non-perishables).</p> <p>Can name and sort foods into the five groups in the Eatwell Guide;</p> <p>Can follow a recipe to make a food product.</p> <p>Can use the basic principles of a healthy and varied diet to prepare dishes. - For example - fruit salad.</p> <p>Can prepare food safely and hygienically and explain what this means.</p> <p>Can describe the qualities of the food ingredients: taste, smell, texture, and consistency.</p> <p>Can use simple food preparation techniques such as cutting, peeling and grating.</p>	<p><u>Knowledge</u></p> <p>Know the different types of resources and materials they can use to make a product and which ones are stronger.</p> <p>Know how mechanisms (such as levers, sliders, wheels and axels) work and can talk about how they are used.</p> <p><u>Food Knowledge</u></p> <p>Know that food comes from either plants (is grown) or animals (farmed).</p> <p>Know that food has to be transported and then stored to arrive in the shops (some in cold conditions to avoid rotting) and how this is done.</p> <p>Know that everyone should eat at least five portions of fruit and vegetables every day and start to explain why.</p> <p><u>Vocabulary</u></p> <p>Prepare, design, development, market research, survey, template, wind up, sketch, tools, attach, features, brick, wood, stone, cloth, metal, foam, felt, paper, tissue,</p>

		<p>together. For example – when making a picture with moving parts, including a lever, lift the flap, etc.</p> <p>Can join fabric to make a simple product. For example - use a basic running stitch.</p> <p>Can use finishing techniques.</p>		<p>Can use simple finishing techniques – For example – icing buns.</p> <p><i>(Equality of opportunity, inclusion, diversity and Cultural Capital – cook food from a variety of countries – e.g. to link with work on 'The Festival')</i></p>	<p>newspaper, cardboard, string, wool, clay, decorate, source, prefer, unsuccessful, future, progress, modify, alter, adapt, finished article, evaluate</p> <p>amount, ingredients, recipe, weight, nutrients, diet, improve</p>
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Year Group	Designing and Making Process			Cooking & Nutrition	Knowledge and	Vocabulary
	Designing	Making	Evaluating			
Y3/4	<p>Can gather information about the needs and wants of particular individuals and groups.</p> <p>Can generate a list of realistic ideas from their own and others' experience.</p> <p>Can develop their own design criteria.</p> <p>Can model their ideas using prototypes and pattern pieces (template).</p> <p>Can draw up a plan by suggesting what to do next as ideas develop.</p> <p>Can make design decisions that take into account the availability of resources.</p> <p>Can model and communicate their ideas through annotated sketches, cross-sectional and exploded diagrams.</p>	<p>Can order the main stages of making.</p> <p>Can use a wider range of materials and components than KS1, including construction materials and kits, textiles, food ingredients and electrical components.</p> <p>Can select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.</p> <p>Can explain what the desired result is.</p> <p>Can make strong, stiff shell structures.</p> <p>Can follow a design to make product and explain how the product works.</p> <p>Can use a single fabric shape to make a 3D textile product, eg. Pencil case, bag, etc.</p>	<p>Can investigate and analyse a range of existing products.</p> <p>Can refer to their design criteria as they design and make.</p> <p>Can use their design criteria to evaluate their completed products and consider the views of others to improve their work.</p> <p>Can identify the strengths and areas for development in their ideas and products.</p> <p>Can consider the views of others, including intended users, to improve their work.</p>	<p>Skills</p> <p>Can follow procedures for safety and hygiene.</p> <p>Can understand and apply the principles of a healthy and varied diet.</p> <p>Can prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques, safely and hygienically including, where appropriate, the use of a heat source.</p> <p>Can use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.</p> <p>Can evaluate recipes in terms of taste, texture etc. and suggest improvements.</p> <p><i>(Equality of opportunity, inclusion, diversity and Cultural Capital – cook food from of variety of countries).</i></p>	<p>Knows how simple electrical circuits and components can be used to create functional products. [for example, series circuits incorporating switches, bulbs, buzzers and motors]</p> <p>Know that food ingredients can be fresh, pre-cooked or processed.</p> <p>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.</p> <p>Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</p> <p>Know that a healthy diet is made up from a</p>	<p>Develop Design Evaluate Appeal Criteria Model Discussion Specific</p> <p>Research Hygiene Communicate Decision Exploded diagrams Prototype</p> <p>Safe Accurately Measurements Seasonal Seasonality Grown Reared Caught Processed Healthy and varied diet Food preservation Hygienic</p>

					<p>variety and balance of different food and drink, as depicted in The Eatwell plate.</p> <p>Know that to be active and healthy, food and drink are needed to provide energy for the body.</p>	
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Year Group	Designing and Making Process			Cooking & Nutrition	Knowledge	Vocabulary
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Y5/6	<p>3-D Structures and Models</p> <p>Create a floor plan for a room they have designed. Use recognised symbols for key aspects such as doors, windows, stairs etc.</p> <p>Can create scale diagrams of structures.</p> <p>Consider audience and customer when planning and selecting finishing materials such as wallpaper in a model house.</p> <p>Produce appropriate lists of tools and equipment they will need.</p> <p>Formulate step by step plans as a guide to making.</p> <p>Inventions to solve problems</p> <p>Can create detailed labelled diagrams of their inventions.</p> <p>Creating products to sell</p> <p>Can design products including jewellery,</p>	<p>3-D Structures</p> <p>Can select the tools and equipment (including textiles) needed to create structures, models and products.</p> <p>Can make careful and precise measurements (using mm) so that joins, holes and openings are in exactly the right place.</p> <p>Can use equipment such as junior hacksaws and glue guns safely and precisely.</p> <p>Ensure that edges are finished by sometimes adding other materials. (e.g. edging strips)</p> <p>Can strengthen, stiffen and reinforce more complex structures and improve the appearance of the products so that they have a high quality finish.</p> <p>Can create an accurate net of a cuboid using thin card.</p> <p>Can use electrical systems and mechanical systems</p>	<p>3-D Structures</p> <p>Check and reject pieces that are not accurate.</p> <p>Can evaluate their own products and determine if they are fit for purpose.</p> <p>Inventions to solve problems</p> <p>Can identify problems or limitations with everyday inventions and imagine ways in which these can be improved.</p> <p>Investigate and analyse a range of existing products and record findings.</p> <p><i>(Equality of opportunity, inclusion, diversity and Cultural Capital – consider inventors, architects etc from a range of backgrounds).</i></p> <p>Creating products to sell</p> <p>Can approximate the cost of a finished piece and adjust the design if necessary so that it can be sold at a profit.</p>	<p>Skills</p> <p>Can evaluate menus and recipes, making decisions about how healthy they are.</p> <p>Can follow recipes and adjust amounts to meet needs.</p> <p>Can evaluate recipes in terms of taste, texture etc.</p> <p>Can work in a safe and hygienic way when cooking.</p> <p>Knowledge</p> <p>Know and understand the principles of a healthy and varied diet.</p> <p>Know that seasonal foods are those available at a particular time of year.</p> <p>Know that there are some times of year that many foods cannot be grown in the UK – e.g. that strawberries can only be grown for a few months in the summer – but that they are available all year round because they are</p>	<p>3-D Structures</p> <p>Know some of the recognised symbols used in floor plans, such as windows, doors etc.</p> <p>Know about some of the architects and artists who designed iconic landmarks in the UK.</p> <p>Inventions to solve problems</p> <p>Know that inventions often solve everyday problems.</p> <p>Know and explain the meanings and purposes of logos, trademarks, patents and copyright.</p> <p>Merchandising</p>	<p>3-D Structures</p> <p>Room plan, fittings, dimensions, hacksaw, bench hook, cladding edging, precise strengthen, stiffen, reinforce</p> <p>finishing, gears, pulleys, cams, levers</p> <p>Inventions to solve problems</p> <p>trademark, patent, copyright invention, logo prototype</p> <p>Creating products to sell</p> <p>finishing polymer clay profit margins</p> <p>Merchandising</p> <p>merchandise, font colour palette Propaganda audience, slogan</p>

	<p>incorporating key elements.</p> <p>Takes into account the needs of the customer when designing items</p> <p>Merchandising Can create logos which are appropriately simple, colourful and effective.</p> <p>Put together a merchandise range which will meet the needs of the customers and raise money for the charity.</p> <p><i>(Equality of opportunity, inclusion, diversity and Cultural Capital – make links with War Child when creating merchandise).</i></p>	<p>(such as gears and pulleys) within their products.</p> <p>Creating products to sell Produce final pieces which are of a high enough quality to sell to customers.</p> <p>Merchandising Produce and combine images and text to enhance music and provide atmosphere and mood.</p> <p>Can create effective slogans.</p> <p>Can select appropriate images to reinforce key messages.</p>		<p>imported from other countries.</p> <p>Know some of the advantages of buying seasonal food – e.g. environmental impact, flavour, effect on local farmers.</p> <p>Know how food is processed into ingredients that can be eaten or used in cooking</p> <p><i>(Equality of opportunity, inclusion, diversity and Cultural Capital – when considering immigration, emigration and refugees, think about the links between this and the range of cuisines available in the UK).</i></p>	<p><u>Know that bands</u> and other organisations will often sell merchandise – e.g. linked to a single, album or tour - in order to make money.</p>	<p>USP – Unique selling proposition</p>
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