Subject Progression

Name of subject: Design Technology

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Design and make	Select appropriate resources *Use gestures, talking and arrangements of materials and components to show design * Use contexts set by the teacher and myself *Use language of designing and making (join, build, shape, longer, shorter, heavier etc.) Construct with a purpose, using a variety of resources *Use simple tools and techniques *Build / construct with a wide range of objects *Select tools & techniques to shape, assemble and join *Replicate structures with materials / components *Discuss how to make an activity safe and hygienic *Record experiences by drawing, writing, voice recording *Understand different media can	•• Design appealing products for a particular user based on simple design criteria. • Generate initial ideas and design criteria through own experiences. • Develop and communicate these ideas through talk and drawings and mock ups where relev • Select and use simple utensils, tools and equipment to perform a job e.g. peel, cut, slice, squeeze, grate and chop safely; marking out ant cutting, joining and finishing; cut, shape and join paper and card. • Select from a range of ingredients and materials according to their characteristics to create a chosen product.	• Generate ideas based on simple design criteria and their own experiences, explaining what they could make. • Develop, model and communicate their ideas through talking, mock-ups and drawings. • Plan by suggesting what to do next. • Select and use tools, equipment, skills and techniques to perform practical tasks, explaining their choices. • Select new and materials, components, reclaimed materials and construction kits to build and create their	• Generate realistic ideas through discussion and design criteria for an appealing, functional product fit for purpose and specific user/s. • Use annotated sketches, prototypes, final product sketches and pattern pieces; communication technology, such as web-based recipes, to develop and communicate ideas • Plan the main stages of making. • Select from and use a range of appropriate utensils, tools and equipment with some accuracy related to their product. • Select from and use finishing techniques suitable for the product they are creating .	use research for design ideas * show design meets a range of requirements and is fit for purpose *begin to create own design criteria *have at least one idea about how to create product and suggest improvements for design. * produce a plan and explain it to others *say how realistic plan is. *include an annotated sketch *make and explain design decisions considering availability of resources *explain how product will work * make a prototype *begin to use computers to show design. select suitable tools and equipment, explain choices in relation to required techniques and use accurately *select appropriate materials, fit for	• Generate innovative ideas through research including surveys, interviews and questionnaires.and discussion with peers to develop a design brief and criteria for a design specification. • Design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification. • Develop and communicate ideas through discussion, annotated drawings, exploded drawings and	* • Use research using surveys, interviews, questionnaires and web-based resources. to develop a design specification for a range of functional products. • Develop a simple design specification to guide the development of their ideas and products, taking account of constraints including time, resources and cost. • Generate and develop innovative ideas and share and clarify these through discussion. • Communicate ideas through annotated sketches, pictorial representations of electrical circuits or circuit diagrams. Formulate a step-by-step plan to guide making, listing tools, equipment, materials and components Competently select from and use appropriate tools to accurately measure, mark, cut and assemble materials,

	be combined for a purpose		products. • Use simple finishing techniques suitable for the products they are creating.		purpose; explain choices * work through plan in order. * realise if product is going to be good quality * measure, mark out, cut and shape materials/components with some accuracy *assemble, join and combine materials and components with some accuracy *apply a range of finishing techniques with some accuracy	drawings from different views. • Produce detailed lists of equipment and fabrics relevant to their tasks :• Write a step-by-step plan, including a list of resources required. • Select from and use, a range of appropriate utensils, tools and equipment accurately to measure and combine appropriate ingredients, materials and resources.	and securely connect electrical components to produce reliable, functional products. • Use finishing and decorative techniques suitable for the product they are designing and making.
Evaluate	Adapt work if necessary *Dismantle, examine, talk about existing objects/structures *Consider and manage some risks *Practise some appropriate safety measures independently *Talk about how things work *Look at similarities and differences between existing objects / materials / tools	• Taste, explore and evaluate a range of products to determine the intended user's preferences for the product • Evaluate their ideas throughout and finished products against design criteria, including intended user and purpose.	• Explore a range of existing products related to their design criteria. • Evaluate their product by discussing how well it works in relation to the purpose, the user and whether it meets the original design criteria.	• Investigate a range of 3-D textile products, ingredients and lever and linkage products relevant to their project. • Test their product against the original design criteria and with the intended user. • Evaluate the ongoing work and the final	designing and making *use criteria to evaluate product * begin to explain how I could improve original design *evaluate existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose * discuss by whom, when and where products were designed	• Investigate and analyse products linked to their final product. • Compare the final product to the original design specification and record the evaluations. • Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. • Consider the views of others to improve their work	Continually evaluate and modify the working features of the product to match the initial design specification. • Critically evaluate their products against their design specification, intended user and purpose, identifying strengths and areas for development, and carrying out appropriate tests. • Test the system to demonstrate its effectiveness for the

	*Show an interest in technological toys *Describe textures •			product with reference to the design criteria and the views of others.	* research whether products can be recycled or reused * know about some inventors/designers/ engineers/chefs/manufacturers of ground-breaking products .		intended user and purpose.
Food and Nutrition	Begin to understand some food preparation tools, techniques and processes *Practise stirring, mixing, pouring, blending *Discuss how to make an activity safe and hygienic *Discuss use of senses *Understand need for variety in food *Begin to understand that eating well contributes to good health	• Understand where a range of fruit and vegetables come from e.g. farmed or grown at home • Understand and use basic principles of a healthy and varied diet to prepare dishes, including how fruit and vegetables are part of The eatwell plate. • Know and use technical and sensory vocabulary relevant to the project.	• Understand where a range of fruit and vegetables come from e.g. farmed or grown at home • Understand and use basic principles of a healthy and varied diet to prepare dishes, including how fruit and vegetables are part of The eatwell plate. • Know and use technical and sensory vocabulary relevant to the project.	• Know how to use appropriate equipment and utensils to prepare and combine food . • Know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught. • Know and use relevant technical and sensory vocabulary appropriately.	• Know how to use appropriate equipment and utensils to prepare and combine food. • Know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught. • Know and use relevant technical and sensory vocabulary appropriately	• Know how to use utensils and equipment including heat sources to prepare and cook food • Understand about seasonality in relation to food products and the source of different food products. • Know and use relevant technical and sensory vocabulary	• Know how to use utensils and equipment including heat sources to prepare and cook food • Understand about seasonality in relation to food products and the source of different food products. • Know and use relevant technical and sensory vocabulary
Textiles	Cut and join textiles using different technics with support Practice weaving and sewing developing fine	measure, cut and join textiles to make a product, with some support *choose suitable textiles and joining technics	measure, cut and join textiles to make a product, urate pieces *choose suitable textiles and joining technics *explain choices of textile *understand that a 3D textile structure	Understand the need for patterns *choose textiles considering appearance and functionality • Know and use technical vocabulary relevant to the project	• Know how to strengthen, stiffen and reinforce existing fabrics. • Understand how to securely join two pieces of fabric together. •	• Produce a 3-D textile product from a combination of accurately made pattern pieces, fabric shapes and different fabrics. • Understand how fabrics can be strengthened, stiffened and reinforced where	• Produce a 3-D textile product from a combination of accurately made pattern pieces, fabric shapes and different fabrics. • Understand how fabrics can be strengthened, stiffened and reinforced where

	and gross motor skills		can be made from two identical fabric shapes		Understand the need for patterns and seam allowances.	appropriate. • Know and use technical vocabulary relevant to the project	appropriate. • Know and use technical vocabulary relevant to the project
Structures/ Mechanisms	Construct with a purpose in mind using a range of resources including construction kits, recycled materials and natural resources.	• Know how to make freestanding structures stronger, stiffer and more stable. • Know and use technical vocabulary relevant to the project.	• Explore and use wheels, axles and axle holders. • Distinguish between fixed and freely moving axles. • Know and use technical vocabulary relevant to the project	• Distinguish between fixed and loose parts. • Know and use technical vocabulary relevant to the project. Explore and use tools and equipment safely and with purpose.	Know and use technical vocabulary relevant to the pr Understand and use electrical systems in their products linked to science coverage. • Apply their understanding of computing to program and control their products. • Know and use technical vocabulary relevant to the project.	• Understand and use electrical systems in their products linked to science coverage. • Apply their understanding of computing to program, monitor and control their products. • Know and use technical vocabulary relevant to the project	• Understand how to strengthen, stiffen and reinforce 3-D frameworks. • Know and use technical vocabulary relevant to the project
Technical Knowledge	Begin to use task plans for support Begin to join and stack materials, considering their properties. Use the correct vocabulary to describe what they are doing.	*begin to measure and join materials, with some support *describe differences in materials *suggest ways to make material/product stronger	*use levers or slides *begin to understand how to use wheels and axles	use appropriate materials *work accurately to make cuts and holes * join materials*alter product after checking, to make it better *begin to try new/different ideas	use number of components in circuit *program a computer to control product	select materials carefully, considering intended use of product and appearance *explain how product meets design criteria *measure accurately enough to ensure precision *ensure product is strong and fit for purpose *begin to reinforce and strengthen a 3D frame .	. select materials carefully, considering intended use of the product, the aesthetics and functionality. *explain how product meets design criteria * reinforce and strengthen a 3D frame

						begin to use cams, pulleys or gears to create movement .	
Vocabulary Progression	Make, build, construct, design, join, stack, fix, glue, stick, tape, scissors, hole punch, names of materials and tools, cut, snip. Hole Holepunch Thread Split pin Card Front Back inside PVA glue Glue stick Treasury tag Split pin Move/still Wood Hammer Nail Strong Weak Sturdy Stable Wobbly Stack	planning, investigating design, evaluate, make, user, purpose, ideas, product, fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients, cut, fold, join, fix structure, wall, tower, framework, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point,	investigating, planning, design, make, evaluate, user, purpose, ideas, design criteria, product, function fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients, vehicle, wheel, axle, axle holder, chassis, body, cab assembling, cutting, joining, shaping, finishing, fixed, free, moving, mechanism	user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, function, planning, design criteria, annotated sketch, appealing name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed,	evaluating, design brief design criteria, innovative, prototype, user, purpose, function, prototype, design criteria, innovative, appealing, design brief, planning, annotated sketch, sensory evaluations name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed,	design decisions, functionality, authentic, user, purpose, design specification, design brief, innovative, research, evaluate, design criteria, annotate, evaluate, mock-up, prototype ingredients, yeast, dough, bran, flour, wholemeal, unleavened, baking soda, spice, herbs fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality utensils, combine, fold, knead, stir, pour, mix, rubbing in,	function, innovative, design specification, design brief, user, purpose design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional, mock-up, prototype ingredients, yeast, dough, bran, flour, wholemeal, unleavened, baking soda, spice, herbs fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality utensils,

		straight, curved, metal, wood, plastic circle, triangle, square, rectangle, cuboid, cube, cylinder joining and finishing techniques, tools, fabrics and components, template,	names of tools, equipment and materials used joining and finishing techniques, tools, fabrics and components, template	seasonal, harvested healthy/varied diet fabric, names of fabrics, finishing technique, templates, stitch, stitch names	seasonal, harvested healthy/varied diet fabric, names of fabrics, fastening, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance series circuit, fault, connection, toggle switch, push-to-make switch, push-to-break switch, battery, battery holder, bulb, bulb holder, wire, insulator, conductor, crocodile clip, control, program, system, input device, output device	whisk, beat, roll out, shape, sprinkle, crumble reed switch, toggle switch, push-to-make switch, push-to-break switch, light dependent resistor (LDR), tilt switch, light emitting diode (LED), bulb, bulb holder, battery, battery holder, USB cable, wire, insulator, conductor, crocodile clip control, program, system, input device, output device, series circuit, parallel circuit seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces, name of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings,	combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces, name of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings,