

## Design and Technology Progression Map

	EYFS Development Matters				
Developmental Bands	Physical development	Understanding the world	Expressive Arts and design		
Birth to Three		Repeat actions that have an effect. Explore materials with different properties. Explore natural materials, indoors and outside.	Start to make marks intentionally.  Explore paint, using fingers and other parts of their bodies as well as brushes and other tools.  Express ideas and feelings through making marks, and sometimes give a meaning to the marks they make.  Start to develop pretend play, pretending that one object represents another. For example, a child holds a wooden block to her ear and pretends it's a phone.  Explore different materials, using all their senses to investigate them. Manipulate and play with different materials.  Use their imagination as they consider what they can do with different materials.  Make simple models which express their ideas.		
Three and four year olds	Choose the right resources to carry out their own plan. For example, choosing a spade to enlarge a small hole they dug with a trowel.  Explain why safety is an important factor in handling tools and moving equipment and materials. Have clear and sensible rules for everybody to follow.  Use one-handed tools and equipment, for example, making snips in paper with scissors.  Use a comfortable grip with good control when holding pens and pencils.	Use all their senses in hands-on exploration of natural materials.  Explore collections of materials with similar and/or different properties.  Talk about what they see, using a wide vocabulary Show interest in different occupations.  Explore how things work.	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.  Join different materials and explore different textures.  Create closed shapes with continuous lines and begin to use these shapes to represent objects.		

Reception	Develop their small motor they can use a range of the competently, safely and Suggested tools: pencils writing, paintbrushes, sciforks and spoons.	tools confidently. for drawing and		Explore, use and refine a variety of artistic express their ideas and feelings. Return to and build on their previous learn refining ideas and developing their ability represent them. Create collaboratively, sharing ideas, resonand skills.		
Strand	National Curriculum					
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Mechanisms	Wheels and axles Sliders and levers		Levers and linkages			Gears and pulleys
Vocabulary	slider, lever, pivot, slot, bridge/guide, card, masking tape, paper fastener, join, pull, push, up, down, straight, curve, forwards, backwards, design, make, evaluate, user, purpose, ideas, design criteria, product, function vehicle, wheel, axle, axle holder, chassis, body, cab, assembling, cutting, joining, shaping, finishing, fixed, free, moving, mechanism, names of tools, equipment and materials used, design, make, evaluate, purpose, user, criteria, functional		mechanism, lever, linkage, pivot, slot, bridge, guide, system, input, process, output, linear, rotary, oscillating, reciprocating, user, purpose, function, prototype, design criteria, innovative, appealing, design brief			pulley, drive belt, gear, rotation, spindle, driver, follower, ratio, transmit, axle, motor. circuit, switch, circuit diagram, annotated drawings, exploded diagrams, mechanical system, electrical system, input, process, output, design decisions, functionality, innovation, authentic, user, purpose, design specification, design brief
Structures		Freestanding structures		Shell Structures including CAD	Frame Structures	
Vocabulary		cut, fold, join, fix, structure, wall, tower, framework,		shell structure, three- dimensional (3-D) shape, net, cube,	<u>frame structure, stiffen, strengthen, reinforce, triangulation, stability,</u>	

	weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved, metal, wood, plastic, circle, triangle, square, rectangle, cuboid, cube, cylinder, design, make, evaluate, user, purpose, ideas, design criteria, product, function		cuboid, prism, vertex, edge, face, length, width, breadth, capacity, marking out, scoring, shaping, tabs, adhesives, joining, assemble, accuracy, material, stiff, strong, reduce, reuse, recycle, corrugating, ribbing, laminating, font, lettering, text, graphics, decision, evaluating, design brief design criteria, innovative, prototype	shape, join, temporary, permanent, design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional	
Textiles	Joining Fabrics	2D to 3D shape			Combining different fabric shapes
Vocabulary	Names of existing products, joining and finishing techniques, tools, fabrics and components, template, pattern pieces, mark out, join, decorate, finish, features, suitable, quality mock-up, design brief, design criteria, make, evaluate, user, purpose, function	fabric, names of fabrics, fastening, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance, user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, aesthetics, function, pattern pieces			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, iron transfer paper, design criteria, annotate, design decisions, functionality, innovation, authentic, user, purpose, evaluate, mockup, prototype
Electrical Systems			Simple Circuits and Switches	More complex circuits and switches	
Vocabulary			series circuit, fault, connection, toggle switch, push-to-make switch, push-to- break switch, battery, battery holder, bulb, bulb holder, wire,	series circuit, parallel circuit, names of switches and components, input device, output device, system, monitor, control, program,	

				insulator, conductor, crocodile clip, control, program, system, input device, output device, user, purpose, function, prototype, design criteria, innovative, appealing, design brief	flowchart, function, innovative, design specification, design brief, user, purpose	
Food and Nutrition	Preparing fruit and vegetables	Regional/UK food	Healthy and varied Diet	Healthy and varied Diet: Mediterranean dish	Celebrating Culture and seasonality: Compare healthy food	Celebrating Culture and seasonality: Cooking on a budget (food from distant places)
Vocabulary	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, planning, investigating tasting, arranging, popular, design, evaluate, criteria	Local, regional, 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, planning, investigating tasting, arranging, popular, design, evaluate, criteria	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, seasonal, harvested healthy/varied diet, planning, design criteria, purpose, user, annotated sketch, sensory evaluations	Mediterranean, 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, seasonal, harvested healthy/varied diet, planning, design criteria, purpose, user, annotated sketch, sensory evaluations	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, whisk, beat, roll out, shape, sprinkle, crumble, design specification, innovative, research, evaluate, design brief	Budget, cost, 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, whisk, beat, roll out, shape, sprinkle, crumble, design specification, innovative, research, evaluate, design brief