



Progression in Design and Technology – The Mill Academy

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
School project 1	Baking bread	Sandwiches and fruit skewers	Superhero Vehicles	Design a meal	Designing and making an Italian dish	Rotating solar System	Design and make an ancient civilisation mask
Topic		Paddington	Superheroes	Archaeology Rocks	Rampaging Romans	Biologists and astrologists unite	Back to the Future
	S/M/E/F/T	S/M/E/F/T	S/M/E/F/T	S/M/E/F/T	S/M/E/F/T	S/M/E/F/T	S/M/E/F/T
School project 2	Access to the art studio, craft techniques, threading, encouraging verbal design, make, construction, lego, small world, through child led experiences	Houses	Building Castles	Layered Rainforest	Musical Instruments	Build an unsinkable ship	Anderson Shelters
Topic		The Great Fire of London	Exploring Castles	Maya Mission	Sound and music	Crossing the Atlantic	War of the World Science circuits
		S/M/E/F/T	S/M/E/F/T	S/M/E/F/T	S/M/E/F/T	S/M/E/F/T	S/M/E/F/T
School project 3	Access to the art studio, craft techniques, threading, encouraging verbal design, make, construction, lego,	Moving Pictures	Sewing flowers	Magnetic Robots	Up cycling old t-shirts into bags	Making Greek food	Making food using WW2 rations



	small world, through child led experiences						
		S/M/E/F/T	S/M/E/F/T	S/M/E/F/T	S/M/E/F/T	S/M/E/F/T	S/M/E/F/T
Topic		Finding Neverland Pirates/mermaids	The Enchanted Wood	Mechanoid Magnetism	Save the planet	Zeros to Heroes	War of the World
Design	- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function; - Share their creations, explaining the process they have used	Design purposeful, functional, appealing products for themselves and other users based on design criteria Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.		Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design			
Vocabulary	idea shape construct build plan, evaluate Wood card paper plastic straw, snip, cut, bend, twist, plait,	idea, shape, make, construct, purpose, customer, aim, develop, template, use, appearance, transparent, opaque, wood, plastic, absorbent, wheel, wool, decoration, pattern, style, lever, survey		functional, appealing, aesthetic, ergonomic, brief, construction, client, purpose, criteria, usability, develop, dimension, evaluate, innovate, manufacture, material, modification, modify, process, product, prototype, quality, research, safety, specification, suitable, cross-section, consumer, dismantle, enlarged, exploded drawing, malleable, market research, proportion, circuit, friction, force, linear, linkage, pulleys, resistance, questionnaire			



School Specific		Idea, shape, make, construct, purpose, template, use, appearance, transparent, opaque, wood, plastic, absorbent, decoration, pattern,	Customer, aim, develop, wheel, wool, style, lever, survey	Appealing, brief, construction, client, purpose, criteria, develop, evaluate, material, modify, research, safety, pulleys,	Suitable, enlarged, market research, proportion, circuit, questionnaire	Functional, usability, dimension, innovate, manufacture, modification, process, product, quality, specification, consumer, exploded drawing, malleable, friction, force, resistance,	Aesthetic, ergonomic, prototype, cross section, dismantle, linear,
Make	<p>- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function;</p> <p>- Share their creations, explaining the process they have used; -.</p>	<p>Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</p> <p>Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</p>	<p>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>Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</p>				
		equipment, tools, saw, cut, join, finish, construct, material, sew, glue, attach, stable, axle, glue gun, joint, scissors, screwdriver, ruler.	carpentry, timber, grain, screw, nails, glue, hinges, chisel, hammer, bench hook, glass paper, smoothing plane, knot, strengthening, right angle, assemble, adhesive, acrylic, dowel, laminate, coping saw,				
School Specific		Equipment, tools, cut, join, finish, construct,	Saw, sew, axle, joint, screwdriver	Glue, strengthening, right angle,	Hammer, laminate,	Hinges, assemble, adhesive, dowel, glass	Carpentry, timber, grain, screw, nails,

Commented [KG1]:



		material, glue, attach, stable, glue gun, scissors, ruler				paper, coping saw, acrylic	chisel, bench hook, smoothing plane, knot, hacksaw
Evaluate		Explore and evaluate a range of existing products Evaluate their ideas and products against design criteria		Investigate and analyse a range of existing products Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work Understand how key events and individuals in design and technology have helped shape the world			
		review, improve,		evaluate, illustrate, critical, analyse			
School Specific		Review, improve		Expected to be taught all year groups			
Technical Knowledge		Build structures, exploring how they can be made stronger, stiffer and more stable Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.		Apply their understanding of how to strengthen, stiffen and reinforce more complex structures Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] Apply their understanding of computing to program, monitor and control their products			
		Lever, sliders, wheels, axles, structures, stronger, stiffer, stable, reinforce, mechanisms		Reinforces, gears, cams, linkages, pulleys, levers, complex, series circuit.			
School Specific		Stronger, Lever, sliders, wheels, axles, structures, stiffer, stable, reinforce, mechanisms.		Reinforces, Lever, pulleys, linkages, cams, gears		Series circuit,	complex
Cooking & Nutrition.		Use the basic principles of a healthy and varied diet to prepare dishes Understand where food comes from.		Understand and apply the principles of a healthy and varied diet Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.			



		fruit, vegetable, healthy, portion, look, taste, texture, smell, size, shape, colour, ingredients, techniques, chopping, peeling, grating, measure, weigh, safety, hygiene, non-standard, farmed, caught, grown, standard measures, labelled increments, prepare, cook, recipe, consistency, heat source, sweet, savoury, recipe		accompaniments, calories, energy, savoury, garnish, diet, variety, carbohydrate, protein, dairy, fat, vitamin, mineral, crumbly, crunchy, greasy, creamy, gooey, moist, mushy, slicing, mixing, spreading, kneading, baking, raw, starchy, stodgy, cubing, creaming, melting, boiling, simmering, seasonality, sensory characteristics, zest. Source, grown, reared, caught, processed, organic, vegetarian, vegan, pescatarian, sustainability, allergies, intolerance, free range.			
School Specific		fruit, vegetable, healthy, , look, taste, texture, smell, size, shape, colour, ingredients, techniques, chopping, peeling, , measure, weigh, safety, hygiene, non-standard, farmed, , grown, , prepare, cook, recipe, , heat, sweet, savoury, recipe	portion, grating, caught, grown, standard measures, labelled increments, prepare, cook, recipe, consistency, heat source, recipe	Energy, savoury, diet, variety, melting, boiling, simmering, source, grown,	carbohydrate, protein, dairy, fat, vitamin, mineral, crumbly, crunchy, greasy, creamy, gooey, moist, mushy, slicing, mixing, spreading, raw, reared, caught, allergies, kneading, baking	Accompaniments, calories, garnish, cubing, sensory characteristics, zest, processed, organic, vegetarian, vegan, pescatarian, intolerance, free range	starchy, stodgy, creaming, sustainability,