



Design and Technology Skills Progression Grid

	EYFS	Years 1 & 2	Years 3 & 4	Years 5 & 6
<p>Developing, Planning and Communicating Ideas</p> <p style="color: red;">Ideas</p> <p style="color: red;">Safety</p>	<ul style="list-style-type: none"> Think of ideas Communicate ideas and plans through talk and drawing Plan and make decisions about how to approach a task 	<ul style="list-style-type: none"> 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. Select from and use a range of tools and equipment to perform practical tasks. Select and use a wide range of materials and components. 	<ul style="list-style-type: none"> Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose. -Generate, develop, model and communicate ideas through discussion, annotated sketches, cross sectional and exploded diagrams, prototypes, pattern pieces and computer aided design. Select from a wider range of tools and equipment. Select from a wider range of materials and components. 	
<p>Cooking and Nutrition</p> <p style="color: red;">Food Preparation and Safety</p> <p style="color: red;">Healthy Diet</p> <p style="color: red;">Origins of Food</p> <p style="color: red;">Measurement</p>	<ul style="list-style-type: none"> Practise stirring, mixing, pouring and blending ingredients during cookery activities Handle equipment and tools effectively 	<ul style="list-style-type: none"> Prepare healthy and balanced dishes using knowledge of food groups Identify foods from different groups and identify their smell, texture and taste Peel and slice food safely using the bridge or claw grip Measure and weigh food items in non-standard units (eg spoons, cups) 	<ul style="list-style-type: none"> Prepare a kitchen and themselves in order to start cooking hygienically Design, prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques Consider the taste, texture, smell and appearance of the dish. Use, store and clean a knife and other cooking equipment safely. Follow a recipe 	<ul style="list-style-type: none"> Research a recipe and list the ingredients needed Follow a recipe including the correct quantities of each ingredient Weigh and measure using scales Adapt a recipe based on prior research Write a recipe: explaining the key steps, method and the ingredients needed. Prepare and cook a variety of predominantly savoury dishes using a

			<ul style="list-style-type: none"> • Measure and weigh ingredients appropriately 	<p>range of cooking techniques</p> <ul style="list-style-type: none"> • Cut and shape ingredients including appropriate tools and equipment • Join and combine food ingredients appropriately
<p>Textiles</p> <p>Using tools and equipment</p> <p>Fabrics</p> <p>Joining and Fastening</p> <p>Product Suitability</p> <p>Measurement</p>	<ul style="list-style-type: none"> • Practice using tools such as scissors, glue, hole punch • Develop skills of weaving with paper, string and wool • Handle equipment and tools effectively • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function 	<ul style="list-style-type: none"> • Join items using different methods (fabric glue, pinning, stapling, stitching) • Mark out places to glue • Thread a needle • Sew a running stitch • Use neat and evenly spaced stitches to join fabric • Use a template to align fabric accurately • Cut fabric neatly • Pin fabric neatly • Tie a knot at each end of the thread • Decorate fabric using different items 	<ul style="list-style-type: none"> • Thread a needle independently, using consistently sized stitches • Knot thread independently • Use cross stitch and double stitching to sew two pieces of fabric together • Use applique (decoration) and reverse applique to create an attractive end product • Cut fabric accurately • Use a paper template, assembling it with pins. • Leave space for a seam to be sewn • Sew seams neatly around an edge • Independently stuff textiles before sewing • Ensure decorations are fixed securely • Attach fastening types to fabric • Explore strength, speed and security of types of fastening • Use units of measurements (cm) accurately when designing and making 	<ul style="list-style-type: none"> • Accurately mark out the outline of panels • Cut neatly and accurately • Adapt a given template to suit their own design • Pin pieces of fabric together before sewing • Sew fabric inside out • Sew a strong running stitch • When sewing, ensure stitches are small, neat and follow the edge • Tie strong knots to secure thread in place • Attach objects for decoration using thread • Secure a fastening to fabric • Accurately measure to the nearest mm.

			<ul style="list-style-type: none"> • Measure and mark where fabric will fold 	
<p>Mechanisms</p> <p>Movement</p> <p>Construction</p> <p>Forces</p> <p>Aesthetics</p> <p>Measurement</p>	<ul style="list-style-type: none"> • With support begin to incorporate moving parts in to models • Handle equipment and tools effectively • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function 	<ul style="list-style-type: none"> • Attach a moving part to a non-moving part (wheel and axle holder) • Fix a design so that the wheel can move • Make a wheel and axle mechanism • Cut axle holders with scissors to the right size and tape to the chassis • Attach wheels to each side of the axle and then thread through the axle holder • Use measurements when designing and making • Use correct amounts of glue or tape to join materials • Use a variety of resources to decorate (tissue paper, paint, glitter etc) 	<ul style="list-style-type: none"> • Design and make a pneumatic system to create a desired motion • Build secure housing for a pneumatic system • Use syringes and balloons to create different types of pneumatic systems • Use syringes and balloons to make a functional and appealing pneumatic toy • Ensure the pneumatic system moves smoothly • Manipulate materials to create different effects by cutting, creasing, folding, weaving, etc 	<ul style="list-style-type: none"> • Use paper, card and glue to make a structure • Make mechanisms including sliders, pivots and fold to produce movement • Measure, mark and cut to produce accurate right angles and neat edges • Use layers and spacers to make work neater and more attractive
<p>Structures</p> <p>Design</p> <p>Construction</p> <p>Materials</p> <p>Joining</p> <p>Measurement</p> <p>Safety</p>	<ul style="list-style-type: none"> • Build and construct with a wide range of objects, selecting appropriate resources • Handle equipment and tools effectively • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function 	<ul style="list-style-type: none"> • Create, assemble and decorate a <i>structure net</i> • Follow instructions to cut and assemble components accurately using card, tape and glue • Cut slowly and carefully, keeping near to the lines of templates • Use resources such as crayons, pens and pencils to decorate • Include features of a building when decorating, 	<ul style="list-style-type: none"> • Add two design points to a 'Design Specification' to appeal to the person/purpose of a structure • Construct a range of 3D geometric shapes using a net • Create structures using nets and junk modelling • Utilise skills to build a complex structure from simple geometric shapes. 	<ul style="list-style-type: none"> • Create beams to support structures • Accurately measure and mark materials to support structures effectively • Create triangles to support beams and structures • Find different ways to reinforce structures • Use a saw safely to make different parts of a structure • Create accurate, neat and secure joints by using

		<p>such as windows and doors</p> <ul style="list-style-type: none"> • Cut and stick different materials onto a surface to decorate • Build a structure that is strong, stiff and stable • Test structures and alter the parts if something doesn't work 	<ul style="list-style-type: none"> • Create a 'base' to secure structures to • Cut neatly and accurately along solid lines • Score edges of card with a ruler and scissors along a dotted line to create defined shapes • Use adequate amounts of glue to ensure structures stay intact • Secure parts of a structure together using tape, blue-tac, glue, or a combination of these. • Stack shapes and recyclable materials to make structures 	<p>correct techniques to cut wood safely</p>
<p>Electrical Systems</p> <p>Circuitry</p> <p>Forces Testing</p> <p>Assembly</p> <p>Tools</p>	N/A	N/A	<ul style="list-style-type: none"> • Make a working electrical circuit • Create a break in an electrical circuit • Make a simple switch using split-pins and card and attach it to a working electrical circuit • Design a torch, considering how the circuit will be kept safe inside the main body of the object • Use materials to create the housing, handle, main cylinder and head of the torch • Use appropriate equipment to cut and attach materials • Assemble and test a torch independently 	<ul style="list-style-type: none"> • Assemble own motor using a range of materials • Tweak a motor to improve its function • Create a 3D perspective drawing of own electrical game • Accurately cut and assemble a net • Use tabs to secure pieces of the net in place • Decorate a base, ensuring a high quality finish. When glued, ensure the net is accurately aligned. • Make and test a circuit • Incorporate a circuit into a base • Use pliers to shape wire • Measure, cut and join components accurately

<p>Evaluation</p> <p>Exploration</p> <p>Investigation</p>	<ul style="list-style-type: none"> • Check how well their activities are going • Adapt their work when necessary • Review how well their approach worked 	<ul style="list-style-type: none"> • Explore and evaluate a wide range on existing products. • Evaluate their own ideas and products against design criteria. 	<ul style="list-style-type: none"> • Investigate and analyse a range of existing products. • Understand how key events and individuals in technology have helped shape the world. 	