



St. James C.E. Primary School

Learn, Laugh and Live with the love of God

Progression in Design & Technology knowledge

	Developing, planning & communicating ideas	Working with tools, equipment, materials & components to make quality products	Evaluating processes & products	Cooking & Nutrition	Textiles	Mechanisms (KS1) Electrical & mechanical components (KS2)	Use of materials (KS1) Stiff & flexible sheet materials (KS2)	Construction (KS1) Mouldable materials (KS2)
FS2		<ul style="list-style-type: none"> • Know that tools can be used for a purpose • Know how to join construction materials together (e.g. blocks) 		<ul style="list-style-type: none"> • Know the names of a variety of foods and food groups • Know why it is important to eat a variety of food 	<ul style="list-style-type: none"> • Know some words to describe textures (e.g. smooth, rough) 		<ul style="list-style-type: none"> • Know some methods for manipulating materials (e.g. squashing, rolling, folding, bending, stretching) 	<ul style="list-style-type: none"> • Know how to make joined construction blocks balance • Know the names of different construction materials
Year 1	<ul style="list-style-type: none"> • Know what an idea is • Know how to label a diagram 	<ul style="list-style-type: none"> • Know the names of a range of tools • Know how to use a range of tools safely 	<ul style="list-style-type: none"> • Know how a product works • Know how to identify things they and others have done well 	<ul style="list-style-type: none"> • Know how to cut food safely using a knife • Know some words to describe the texture of different foods • Know to wash their hands and why • Know to make 	<ul style="list-style-type: none"> • Know some words to describe the texture of different materials • Know some different types of glue • Know which glues are best to join which materials 	<ul style="list-style-type: none"> • Know some methods for making a product that moves (e.g. wheels, levers) 	<ul style="list-style-type: none"> • Know how to tell if a model needs to be stronger • Know the names of some materials that will make strong models 	<ul style="list-style-type: none"> • Know what a plan is • Know how to label a drawing/diagram • Know the definition of 'construction'

				sure that surfaces are clean and why				
Year 2	<ul style="list-style-type: none"> • Know what equipment, tools and materials are • Know what a design is 	<ul style="list-style-type: none"> • Know some methods for joining things together 	<ul style="list-style-type: none"> • Know how to identify things that could be improved 	<ul style="list-style-type: none"> • Know words to describe the properties of ingredients • Know what the word hygienic means • Know how to be hygienic when preparing and cooking food 	<ul style="list-style-type: none"> • Know the appropriate units for measuring textiles • Know some different methods of joining textiles together • Know that different scissors are needed to cut some materials 	<ul style="list-style-type: none"> • Know some methods for joining materials together so that the product can still move 	<ul style="list-style-type: none"> • Know the appropriate instruments to measure materials (e.g. ruler, meter stick, tape measure) • Know how to fold and roll different materials 	<ul style="list-style-type: none"> • Know what initial ideas are • Know the best materials to use for construction • Know some methods for making a moving construction
Year 3	<ul style="list-style-type: none"> • Know how to create a simple plan • Know what design criteria is 	<ul style="list-style-type: none"> • Know how to use necessary equipment and tools safely and accurately 	<ul style="list-style-type: none"> • Know how to identify changes that result in a product being improved 	<ul style="list-style-type: none"> • Know how to find out what ingredients they will need • Know how to use a range of equipment safely • Know how to grow a variety of plants 	<ul style="list-style-type: none"> • Know some properties of materials that make an aesthetically appealing product • Know some properties of materials that make a product of high quality 	<ul style="list-style-type: none"> • Know how to test a product • Know what hydraulics are • Know what pneumatics are 	<ul style="list-style-type: none"> • Know how to make cuts and holes in different materials • Know a range of joining techniques 	<ul style="list-style-type: none"> • Know a range of methods to shape and mould materials • Know what finishing techniques are
Year 4	<ul style="list-style-type: none"> • Know how to create a chronological step-by-step plan • Know how to evaluate ideas and choose the best one 	<ul style="list-style-type: none"> • Know what makes a good quality product • Know that sometimes the original idea does not work and what to do if this happens 	<ul style="list-style-type: none"> • Know how to check if their design is successful • Know how to check if the appearance and workings of their product is successful 	<ul style="list-style-type: none"> • Know a range of methods for presenting different foods in interesting ways 	<ul style="list-style-type: none"> • Know different methods for making strong products • Know what a template is and why it is used 	<ul style="list-style-type: none"> • Know the names of some components that can be added to circuits (e.g. switches, bulbs, motors, buzzers) 	<ul style="list-style-type: none"> • Know how to measure carefully and accurately • Know some methods for making a product stronger (e.g. folding, rolling or joining materials) 	<ul style="list-style-type: none"> • Know an advanced range of methods to shape and mould materials • Know how finishing technique impact on the audience
Year 5	<ul style="list-style-type: none"> • Know why it is important to conduct research 	<ul style="list-style-type: none"> • Know how to make a good quality product 	<ul style="list-style-type: none"> • Know how to evaluate their final product against the 	<ul style="list-style-type: none"> • Know how to be hygienic and safe • Know what can 	<ul style="list-style-type: none"> • Know what a prototype is and why it is used 	<ul style="list-style-type: none"> • Know what a switch is and how to incorporate one 	<ul style="list-style-type: none"> • Know the definition of 'precise' 	<ul style="list-style-type: none"> • Know how to evaluate the effectiveness of

	<ul style="list-style-type: none"> • Know how research can inform planning • Know how to produce a detailed step-by-step plan 	<ul style="list-style-type: none"> • Know what a target audience is • Know the different stages of the making process 	<p>design criteria</p> <ul style="list-style-type: none"> • Know the importance of checking their product against their design whilst they make it 	<p>happen if they are not hygienic and safe</p>	<ul style="list-style-type: none"> • Know why it is important to consider what the user will want 	<p>into a circuit</p> <ul style="list-style-type: none"> • Know what electrical components are • Know what mechanical components are • Know what a simple circuit is 	<ul style="list-style-type: none"> • Know the importance of precise measurement 	<p>their product</p> <ul style="list-style-type: none"> • Know some methods for refining and improving their product using mouldable materials
Year 6	<ul style="list-style-type: none"> • Know what market research is • Know what constraints are • Know why culture and society should be considered when designing a product 	<ul style="list-style-type: none"> • Know how to use a range of tools and materials precisely • Know some methods of changing the way they are working if needed 	<ul style="list-style-type: none"> • Know how to test their final product • Know how to check that their final product is fit for purpose • Know a range of resources that could improve their product 	<ul style="list-style-type: none"> • Know how and why to store a range of products • Know how long different salad items take to grow 	<ul style="list-style-type: none"> • Know methods for selling products • Know methods for improving a range of products 	<ul style="list-style-type: none"> • Know the names of different kinds of circuits (e.g. series and parallel) • Know how a simple series circuit works 	<ul style="list-style-type: none"> • Know what joints are • Know how and why to hide joints 	<ul style="list-style-type: none"> • Know the properties of a range of mouldable materials • Know why a material's properties makes it suitable for the product & audiences