St. James C.E. Primary School

Learn, Laugh and Live with the love of God

Progression in Design & Technology skills

	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	• Represent their own ideas, thoughts and feelings	• Realise that tools can be used for a purpose • Select tools and techniques needed to shape, assemble and join materials they are using		• Understand need for a variety in food	• Describe the texture of things • Experiment to create different textures		• Manipulate materials to achieve a planned effect	• Use various construction materials • Construct by stacking blocks vertically and horizontally • Join construction pieces together to build and balance
Year 1	• Think of some ideas of their own • Explain what they want to do • Use pictures and words to plan	• Explain what they are making • Explain which tools they are using	• Describe how something works • Talk about their own work and things that other people have done	• Cut food safely • Describe the texture of foods • Wash their hands and make sure that surfaces are clean • Think of interesting ways of	• Describe how different textiles feel • Make a product from textiles by gluing	• Make a product which moves • Cut materials using scissors • Describe the materials using different words • Say why they	• Make a structure/ model using different materials • Make their model stronger if it needs to be	• Talk with others about how they want to construct their product • Select appropriate resources and tools for their building

				decorating food they have made		have chosen moving parts		projects • Make simple plans before making objects, e.g. drawings, arranging pieces of construction before building
Year 2	• Think of ideas and plan what to do next • Choose the best tools and materials • Give a reason why these are best • Describe their design by using pictures, diagrams, models and words	• Join things (materials /components) together in different ways	• Explain what went well with their work • Explain what they would improve	• Describe the properties of the ingredients they are using • Explain what it means to be hygienic • Be hygienic in the kitchen	• Measure textile • Join textiles together to make something • Cut textiles • Explain why they chose a certain textile	• Join materials together as part of a moving product • Add some kind of design to their product	• Measure materials to use in a model or structure • Join material in different ways • Use joining, folding or rolling to make it stronger	• Make sensible choices as to which material to use for their constructions • Develop their own ideas from initial starting points • Incorporate some type of movement into models • Consider how to improve their construction
Year 3	• Show that their design meets a range of requirements • Put together a step-by-step plan which shows the order and also what equipment and tools they need • Describe their design using an accurately labelled sketch and words • Develop a realistic plan	• Use equipment and tools accurately	• Explain what they changed which made their design even better	• Choose the right ingredients for a product • Use equipment safely • Make sure that their product looks attractive • Describe how their combined ingredients come together • Grow plants such as cress and herbs from seed with the intention of using	• Join textiles of different types in different ways • Choose textiles both for their appearance and qualities	• Select the most appropriate tools and techniques to use for a given task • Refine their product after testing it • Incorporate hydraulics and pneumatics	• Use the most appropriate materials • Work accurately to make cuts and holes • Join materials	• Select the most appropriate materials • Use a range of techniques to shape and mould • Use finishing techniques

				• them for their food product				
Year 4	• Come up with at least one idea about how to create their product • Take account of the ideas of others when designing • Produce a plan and explain it to others • Suggest some improvements and say what was good and not so good about their original design	• Tell if their finished product is going to be good quality • Show a good level of expertise when using a range of tools and equipment • Work at their product even though their original idea might not have worked	• Think of how they will check if their design is successful • Begin to explain how they can improve their original design • Evaluate their product, thinking of both appearance and the way it works • Take time to consider how they could have made their idea better	• Be hygienic and safe • Think what they can do to present their product in an interesting way	• Think what the user would want when choosing textiles • Think about how to make their product strong • Devise a template • Explain how to join things in a different way	• Add things to their circuits • Alter their product after checking it • Try out new and different ideas	• Measure carefully so as to make sure they have not made mistakes • Attempt to make their product strong	• Use a range of advanced techniques to shape and mould • Use finishing techniques, showing an awareness of audience
Year 5	• Generate a range of ideas after they have collected information • Take a user's view into account when designing • Produce a detailed step-by-step plan • Suggest some alternative plans and say what the good points and drawbacks are about each	• Explain why their finished product is going to be of good quality • Explain how their product will appeal to the audience • Use a range of tools and equipment expertly • Persevere through different stages of the making process	• Keep checking that their design is the best it can be • Check whether anything could be improved • Evaluate appearance and function against the original criteria	• Describe what they do to be both hygienic and safe • Present their product well	• Think what the user would want when choosing textiles • Make their product attractive and strong • Make up a prototype first • Use a range of joining techniques	• Incorporate a switch into their product • Make a product which uses both electrical and mechanical components • Use a simple circuit • Use a number of components	• Measure accurately to ensure that everything is precise • Ensure that their product is strong and fit for purpose	• Refine and further improve their product using mouldable materials
Year 6	• Use a range of information to	• Use tools and materials precisely	• Test and evaluate their final product	• Explain how their product should be	• Think about how their product could	• Use different kinds of circuit in	• Justify why they selected specific	• Justify why chosen material

inform their design • Use market research to inform plans • Work within constraints • Follow and refine their plan if necessary • Justify their plan to someone else • Consider culture and society in their designs	• Change the way they are working if needed	• Ensure product is fit for purpose • Suggest improvements • Suggest resources have improved their product • Select information to make it even better • Design criteria are met • Consider the use of the product when selecting materials	stored with reasons • Set out to grow their own products with a view to making a salad, taking account of time required to grow different foods	be sold • Consider what would improve their product even more	their product • Think of ways in which adding a circuit would improve their product	materials • Ensure that their work is precise and accurate • Hide joints so as to improve the look of their product	was the best for the task • Justify their design in relation to the audience