St Margaret's C of E Junior School

Progression of Skills and Knowledge in Design & Technology Years 3 &4

Autumn
Spring
Summer

Skills Knowledge	Year 3	Year 4
Developing, planning and communicating ideas.	-Gather ideas by drawing on their own and other people's experiences -Generate ideas for an item, considering its purpose for which they are designing. -Consider appearance, taste, texture and aroma for an appealing product -Use recipes to test or generate ideas for a sandwich -Set criteria for a successful product. - Plan the order of their work before starting with basic listing of steps. -Make drawings with labels when designing -Link structures with maths and language related to shape. -Develop an understanding of what a basic net is and how it links with structure. -Know key vocab: designer, purpose, product, functional, evaluate -Understand what a recipe is and generate own with ingredients and utensils -Use maths language related to shape when creating structures – 3D, cylinders, weight, triangular, base…, -Know what a shell structure is. -Know what a healthy sandwich is. -Identify textile examples. -Know how to construct a basic, stiff, shell structure	-Gather ideas by drawing on their own and other people's experiences - Generate ideas, considering the purposes for which they are designing and their users. -Consider appearance, taste, texture and aroma for an appealing product -Use recipes to test or generate ideas for pitta bread/ cultural bread and dips - Identify criteria that can be used for their own designs and evaluate the product based on this. -Make labelled drawings from different views showing specific features - Suggest alternative methods of making, if the first attempts fail - Know key vocab: designer, purpose, product, user, criteria, features, evaluate -Understand what a recipe is and generate own with ingredients, utensils and steps -Know what a healthy sandwich is and can select examples -Know about fresh and processed ingredients and whether grown, reared or caught -Identify food from different cultures and countries -Use Science language related to electricity when creating torches -Understand the term mechanism -Identify the key components in a mechanism using language such as lever, pivot, slider, flap, rotate
Working with tools, equipment, materials and components to make quality products (including food)	-Select tools and techniques for making their product -Begin to use names of tools and techniques - Measure, mark out, cut, score and assemble components with more accuracy -Work safely with a range of simple tools --Weigh and measure accurately (length, dry ingredients) -Measure, tape or pin, cut and join fabric with some accuracy, exploring basic stitches - Select and use appropriate fruit and vegetables. -Demonstrate basic hygienic food preparation and storage -Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT -Name and identify different basic stitches. -Name the tools and materials they have used. -Know what a pattern/template is and how to use one. -Know how to strengthen, stiffen or reinforce when using textiles or creating structures -Explain how to securely join two pieces of material together -Understand about healthy eating and provide food examples based on food groups -Name utensils and ingredients -Identify between fresh and processed foods	-Select appropriate tools and techniques for making their product -Use correct name of tools and techniques with growing confidence -Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques - Join and combine materials and components accurately in temporary and permanent ways -Work safely and accurately with a range of simple tools ---Weigh and measure accurately (length, dry ingredients, time) -Sew using a range of different stitches, weave and knit -Measure, tape or pin, cut and join fabric with some accuracy - Select and use appropriate fruit and vegetables to meet specific criteria and user needs. -Demonstrate hygienic food preparation and understand the reasons for safe storage, know safe chopping and slicing techniques -Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT -Name a broader range of stitches such as zig-zag and chain. -Name and match the tool to the material and explain its use. -Name utensils, ingredients and techniques being used – sliced, diced… -Identify between fresh and processed foods and know why some foods are processed -Know and identify the electrical components in a circuit and the purpose of each part -Name how to construct a simple circuit with a switch and bulb -Know how to construct a lever and linkage system and the movement created -Explain the differences between fixed and loose pivots
Evaluating processes and products	-Investigate a range of textile/3D products/shells and structures relevant to the project -Evaluate and test their product against original design criteria -Disassemble and evaluate familiar products -Explain the sensory characteristics of a product -Know and use relevant sensory and technical vocabulary -Explain how the product compares with the design -Identify sensory characteristics when describing a product	-Investigate and analyse a range of existing battery powered products/torches/pop-up books Evaluate their work both during and at the end of the assignment -Evaluate their product carrying out appropriate tests against original design criteria and state the successes/development points -Disassemble and evaluate familiar products looking at key components -Know and use relevant sensory and technical vocabulary to describe texture and aroma of food -Know and use technical vocabulary relevant to circuits and torches -Identify levers and linkages within books, using relevant vocabulary when discussing the mechanisms -