

## Technology Stepping Stones

	Knowledge	Skills
<b>GSS 1</b>	<ul style="list-style-type: none"> <li>• I know there are a range of different materials that can be used to make a model and that they are all slightly different.</li> <li>• I know that 'waterproof' materials are those which do not absorb water.</li> <li>• I know that a design is a way of planning our idea before we start.</li> <li>• I know that threading is putting one material through an object.</li> </ul>	<ul style="list-style-type: none"> <li>• I can join different materials together.</li> <li>• I can describe their junk model and how I intend to put it together.</li> <li>• I can make a boat that floats and is waterproof</li> <li>• I can use a prepared needle and wool to practice threading.</li> <li>• I can discuss what a good design needs.</li> <li>• I can recognise rules about being clean and safe in the food room.</li> <li>• I can recognise some basic cooking utensils by knowing what a knife, fork, spoon is.</li> </ul>
<b>GSS 2</b>	<ul style="list-style-type: none"> <li>• I know that the shape of materials can be changed to improve the strength and stiffness of structures.</li> <li>• I understand the difference between fruits and vegetables.</li> <li>• I know that design criteria is a list of points to ensure the product meets the client's needs and wants.</li> <li>• I begin to understand that different structures are used for different purposes.</li> </ul>	<ul style="list-style-type: none"> <li>• I can make stable structures from card, tape and glue.</li> <li>• I can chop fruit and vegetables safely to make a smoothie.</li> <li>• I can taste and evaluate different food combinations.</li> <li>• I can use joining methods to decorate a puppet.</li> <li>• I can cut fabric neatly with scissors.</li> <li>• I can suggest points for improvements.</li> <li>• I can follow basic guided instructions with support when preparing food.</li> <li>• I can identify a few pieces of basic cooking ingredients.</li> </ul>
<b>GSS 3</b>	<ul style="list-style-type: none"> <li>• I know that shapes and structures with wide, flat bases or legs are the most stable.</li> <li>• I know that natural structures are those found in nature and that manmade structures are those made by people.</li> <li>• I know that mechanisms are a collection of moving parts that work together as a machine to produce movement.</li> <li>• I know some real-life objects that contain mechanisms.</li> </ul>	<ul style="list-style-type: none"> <li>• I can create joints and structures from paper/card and tape.</li> <li>• I can select materials according to their characteristics.</li> <li>• I can experiment with linkages by adjusting the widths, lengths and thicknesses of card used.</li> <li>• I can follow a design brief.</li> <li>• I can evaluate the strength, stiffness and stability of own structure.</li> <li>• I can follow class routines to protect myself when I start to get ready to prepare food.</li> </ul>
<b>GSS 4</b>	<ul style="list-style-type: none"> <li>• I understand the importance of strength and stiffness in structures.</li> <li>• I know that vegetables and fruit grow in certain seasons.</li> <li>• I know that each fruit and vegetable give us nutritional benefits because I contain vitamins, minerals and fibre.</li> <li>• I know that a design specification is a list of success criteria for a product.</li> </ul>	<ul style="list-style-type: none"> <li>• I can draw and label a design using 2D shapes, labelling the 3D shapes that will create the features, materials needed, and colours.</li> <li>• I can create a healthy and nutritious recipe for a savoury tart using seasonal ingredients, considering the taste, texture, smell and appearance of the dish.</li> <li>• I can describe where a few pieces of basic utensils are stored by identifying the labels on cupboards and drawers.</li> </ul>

<b>GSS 5</b>	<ul style="list-style-type: none"> <li>• I know that a 'free-standing' structure is one that can stand on its own.</li> <li>• I understand that the target audience means the person or group of people a product is designed for.</li> <li>• I know that aesthetics means how an object or product looks in design and technology.</li> <li>• I know that it is important to assess and evaluate design ideas and models against a list of design criteria.</li> </ul>	<ul style="list-style-type: none"> <li>• I can design a stable pavilion structure that is aesthetically pleasing and select materials to create a desired effect.</li> <li>• I can measure, mark, cut and assemble with increasing accuracy.</li> <li>• I can assemble a torch according to the design and success criteria.</li> <li>• I can consider effective and ineffective designs and describe what characteristics of a design and construction made it the most effective.</li> <li>• I can demonstrate some hygienic actions with support e.g. put on an apron</li> <li>• I can identify where some basic ingredients are stored by identifying the fridge and cupboards.</li> <li>• I can show an awareness that changes occur during preparation and cooking actions.</li> </ul>
<b>GSS 6</b>	<ul style="list-style-type: none"> <li>• I understand that mechanisms can be used to change one kind of motion into another.</li> <li>• I know a motorised product is one that uses a motor to function.</li> <li>• I know that a design brief is a description of what I am going to design and make.</li> <li>• I know that designers often want to hide mechanisms to make a product more aesthetically pleasing.</li> <li>• I understand that 'cross-contamination' means bacteria and germs have been passed onto ready-to-eat foods and it happens when these foods mix with raw meat or unclean objects.</li> </ul>	<ul style="list-style-type: none"> <li>• I can make mechanisms and/or structures using sliders, pivots and folds to produce movement.</li> <li>• I can alter a product's form and function by tinkering with its configuration.</li> <li>• I can use equipment safely, including knives, hot pans and hobs.</li> <li>• I can adapt a recipe to make it healthier by substituting ingredients.</li> <li>• I can carry out a product analysis to look at the purpose of a product along with its strengths and weaknesses.</li> <li>• With prompting I can demonstrate a few safety actions to protect myself</li> <li>• I can describe what the functions are of essential electric equipment by identifying different parts of the cooker.</li> <li>• I can discuss what I am about to do when I know what dish I will prepare and/or cook.</li> </ul>
<b>GSS 7</b>	<ul style="list-style-type: none"> <li>• I know that structures can be strengthened by manipulating materials and shapes.</li> <li>• I understand that in the real world, design, can impact users in positive and negative ways.</li> <li>• I know that a prototype is a cheap model to test a design idea.</li> <li>• I understand that it is important to design clothing with the client/ target customer in mind.</li> </ul>	<ul style="list-style-type: none"> <li>• I can build a range of play apparatus structures drawing upon new and prior knowledge of structures.</li> <li>• I can measure, mark and cut wood and fabric to create different products.</li> <li>• I can develop a product idea through annotated sketches.</li> <li>• I can reflect on my work continually throughout the design, make and evaluate process.</li> <li>• I can describe/demonstrate what to do to be safe and hygienic before preparing food</li> <li>• I can identify and gather some basic equipment and ingredients when preparing and cooking a recipe.</li> </ul>



• I can demonstrate an awareness of what to prepare and how to prepare it e.g. ingredients and equipment have to be laid out before any cooking can begin.