

Wingrove Design and Technology Knowledge and Skills Progression Map – Subject Leader Overview

Key Objectives Based on National Curriculum	Year	Design	Make	Evaluate	Technical knowledge	Cooking and nutrition	Term and Unit Covered
<p>To design, create and explain their own innovative product/model using appropriate vocabulary when evaluating, drawing upon their prior knowledge and skills from across the curriculum.</p> <p>To understand and value the joys of cooking and how to achieve it.</p>	1	<p>I can create an imaginative product, in conjunction with simple success criteria, and explain how it's made verbally e.g. I can 'show and tell' my drawing of a robot.</p>	<p>I can choose the right the tool for the job e.g. scissors to cut.</p> <p>I understand the idea of materials and components e.g. bricks are hard: they hold things up.</p>	<p>I can say what something is used for e.g. bricks are used for building.</p>	<p>I can use appropriate vocabulary when explaining my model e.g. the bricks are strong/hard.</p>	<p>I know some foods and drinks are good and bad for me.</p> <p>I can use my knowledge to explain verbally why a dish is healthy.</p>	
	2	<p>I can use simple labelling to explain a design e.g. I can create a diagram pointing to features on the robot.</p> <p>I can use evaluation to develop better products e.g. utilising advice to make a better robot.</p>	<p>I can combine a range of everyday tools to create a simple design e.g. I can draw, cut and stick together a model using the correct tools.</p> <p>I can choose appropriate materials and explain why e.g. I have chosen to build a house out of Lego bricks, not rice.</p>	<p>I can use evaluation to develop a second, improved prototype e.g. I can draw a second robot that is an improvement on the first using simple criteria.</p>	<p>I can create a moving object and explain to you what component makes it move using appropriate vocabulary e.g. a Lego car with wheels and the wheels are making it move.</p>	<p>I can safely prepare a simple, healthy dish.</p> <p>I know that some food grows and that there is a process for others e.g. carrots come from the ground, beef comes from a cow.</p>	
<p>To design, create and explain their own innovative product using appropriate vocabulary when evaluating.</p> <p>Draw upon prior</p>	3	<p>I can design a useful product e.g. something for my bedroom.</p> <p>I can draw and label my own design.</p>	<p>I can select tools and techniques to make a more intricate design.</p> <p>I understand the importance of safety in making a design.</p>	<p>I can evaluate my own design against criteria.</p>	<p>I know there are technical terms used in design and technology.</p>	<p>I know where and how a variety of healthy ingredients are grown, reared, caught and processed.</p> <p>I can select the right tools to prepare raw edible ingredients.</p>	

<p>knowledge and skills from across the curriculum e.g. history of inventors.</p> <p>Make use of scientific and mathematical knowledge e.g. apply electrical knowledge to designs</p>	4	<p>I can design a useful and appealing product that is aimed at an audience e.g. for my dad to use in the kitchen.</p> <p>I can draw and label my own design explaining the parts.</p>	<p>I can select appropriate tools to measure and assemble a more complex design.</p> <p>I can recommend the appropriate safety equipment</p> <p>I can dissect and identify components and their properties.</p>	<p>I can do research to find out what product would be useful.</p> <p>I can evaluate mine or my peer's product against specific criteria.</p> <p>I can measure the impact of inventors and inventions from history.</p>	<p>I am beginning to use technical terminology.</p>	<p>I can use science to understand seasonality of produce e.g. strawberries only grow in the summer.</p> <p>I can prepare uncooked raw edible ingredients safely e.g. I can cut a carrot.</p>	
<p>Understand design and technology terminology such as: aesthetic qualities, properties (brittle, robust, durable, stiffness), prototypes, diagrams, cross-sectional diagrams.</p> <p>Mechanical, electrical or functional terminology: cams, joining, finishing, gears, pulleys, levers, linkages; series, circuits, bulbs, motors and buzzers.</p> <p>To understand and value the joys of cooking and how to achieve it.</p>	5	<p>I can use research to inform my design choices.</p> <p>I can design a purposeful, innovative, functional and appealing product.</p> <p>I can label and explain my own design and use appropriate terminology</p>	<p>I can use an advanced tool safely e.g. sawing wood.</p>	<p>I can use good terminology to investigate and evaluate a range of products e.g. stem sentences to support sophisticated/ advanced feedback</p> <p>I can draw comparisons between two or more products designed to suit the same purpose.</p>	<p>I can understand and apply some technical terms to my explanations and designs e.g. improve the stiffness or durability.</p>	<p>I can apply theory in planning the nutritious food I want to eat e.g. knowing when to plant strawberries if they are going to be ready for the summer.</p> <p>I can safely use a range of equipment to create a nutritional dish.</p>	
	5	<p>I can design an innovative, functional and appealing product to solve a problem e.g. water aid (clean water)</p> <p>I can label my own detailed design and use appropriate terminology throughout my explanation.</p>	<p>I can safely create a useful product from using advanced tools e.g. an arm of a soldier by sawing wood.</p> <p>I can apply aesthetic knowledge to my own design e.g. detailed paintwork on a model soldier created by me.</p> <p>I know the right components because of their properties.</p>	<p>I can evaluate the strengths and weaknesses both generally and specifically on designs by myself or others.</p>	<p>I understand and make use of technical concepts throughout my explanations and designs e.g. bridge building/ evaluating/ re building.</p>	<p>I can plan and prepare a nutritious, balanced and in season menu.</p> <p>I know and can use the appropriate tools, techniques and safety measures to prepare a full menu.</p>	