Year 3 Design and Technology Progression of Knowledge & Skills

Year 3 Progression of Knowledge and Skills	
Developing planning and communicating ideas	• I can start to understand whether products can be **recycled** or **reused**. • I can generate ideas for an item, considering its purpose and the user/s • I can order the main stages of making a product.
Working with tools, equipment, materials and components to make quality products	• I can select a wider range of tools and techniques for making their product i.e. **textiles** • **I can measure, mark out, cut, score** and assemble components with more accuracy. • I can **measure, tape, cut** and **join** materials with some accuracy. • I can work safely and accurately with a range of simple tools.
Evaluating processes and products	• I can disassemble and evaluate familiar products and consider the views of others to improve them. • I can think about my ideas as they make progress and be willing to change things if this helps me to improve my work. • I can evaluate my product against original design criteria e.g. how well it meets its intended purpose. • I can evaluate the key designs of individuals in design and technology has helped shape the world.
Food and Nutrition	• I know that to be **active** and **healthy**, food and drink are needed to provide energy for the body. • I know that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eat well plate'.
Vocabulary: (in addition to, and building on previous year- see also BOLD items above) pizza, toppings, dough, rise	

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Design use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design	**Design For Manufacture:** • I can generate ideas for an item, considering its purpose and the user/s • I can order the main stages of making a product. • I can identify a purpose and establish criteria for a successful product. • I can explain my choice of materials for aesthetics.
	Creative Risk: • I can make drawings with labels when designing.
	Food:

<table>
<tr><td rowspan="3">Make
select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</td><td>Design For Manufacture:
• I can select a wider range of tools and techniques for making my product i.e. construction materials and kits, food ingredients and mechanical components</td></tr>
<tr><td>Creative Risk:
• I can measure, mark out, cut, score and assemble components with more accuracy.
• I can measure, tape, cut and join materials with some accuracy.</td></tr>
<tr><td>Food:
• I can work safely and accurately with a range of simple tools.</td></tr>
<tr><td rowspan="3">Evaluating
investigate and analyse a range of existing products evaluate their ideas and products against their own design criteria and consider the views of others to improve their work understand how key events and individuals in design and technology have helped shape the world</td><td>Design For Manufacture:
• I know how well products have been designed, made, what materials have been used and the construction technique.
• I know ideas from existing inventors, designers, engineers, chefs and manufacturers – this may be through computer research
• I can disassemble and evaluate familiar products and consider the views of others to improve them.</td></tr>
<tr><td>Creative Risk:
• I can think about my ideas as they make progress and be willing to change things if this helps me to improve my work.
• I can evaluate my product against original design criteria e.g. how well it meets its intended purpose.</td></tr>
<tr><td>Food:
• I can understand my choice of tools and equipment in relation to the skills and techniques they will be using I.e grater, knife, rolling pin
• I can evaluate the key designs of individuals in design and technology has helped shape the world.</td></tr>
<tr><td rowspan="3">Technical knowledge
Technical knowledge apply their understanding of how to strengthen, stiffen and reinforce more complex structures understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] apply their understanding of computing to program, monitor and control their products.</td><td>Design For Manufacture:</td></tr>
<tr><td>Creative Risk:
• I know that mechanical systems such as axels allow the movement of wheels across a chassis.</td></tr>
<tr><td>Food:
• I know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source.
• I can use a range of techniques such as chopping, slicing, grating, mixing, spreading, kneading and baking.
• I know that a healthy diet is made up from a variety and balance of different food and drink, as depicted in ‘The Eat well plate’</td></tr>
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Assessment End Points Year 3	
Knowledge	**Skills**
• I know ideas from existing **inventors, designers, engineers, chefs** and **manufacturers** – this may be through computer research. • I know that mechanical systems such as axels allow the movement of wheels across a chassis. • I know that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eat well plate' • I know that mechanical systems such as axels allow the movement of wheels across a chassis.	• I can use a range of techniques such as **chopping, slicing, grating, mixing, spreading, kneading** and **baking**. • I can identify a purpose and establish criteria for a successful product. • I can make drawings with labels when designing. • I can sort foods that make a healthy diet from a variety and balance of different foods, as depicted in 'The Eat well plate'. • I can use a range of techniques: chopping, spreading, kneading. • I can identify the purpose of a successful product and evaluate it (against a criteria). • I can fold, cut and join different materials following a template. • I can use ideas from existing inventors, designers, engineers and manufacturers.