



Lower Key Stage 2 Design and Technology Progression of Knowledge & Skills



National Curriculum	Cycle A (Formerly Year 4) Progression of Knowledge and Skills
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:
	Cycle A • I can start to generate ideas, considering the purposes for which they are designing - there may be links with Mathematics and Science. • When planning, consider the views of others, including intended users, to improve their work. • Understand some materials may be more sustainable or have easier supply than others. • When planning, explain their choice of materials and components according to function and aesthetic
	Cycle B • I can start to understand whether products can be recycled or reused. • I can order the main stages of making a product.
	Creative Risk:
	Cycle A • I can develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail.
	Cycle B • I can generate ideas for an item, considering its purpose and the user/s.
	Food:
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	Cycle A • I know that a healthy diet is made up from a variety and balance of different food and I understand the content of sugars.
	Cycle B • 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'.
	Design For Manufacture:
	Cycle A • I can select a wider range of tools and techniques for making their product i.e. construction materials and kits, textiles, food ingredients, mechanical components. • I understand their choice of tools and equipment in relation to the skills and techniques they will be using. • I can measure, mark out, cut, score and assemble components with more accuracy. • I can start to work safely and accurately with a range of simple tools.
	Cycle B • 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.
	Creative Risk:
	Cycle A • I can start to think about their ideas as they make progress and be willing to change things if this helps them to improve their work. • I can select a wider range of tools and techniques for making their product i.e. construction materials and kits, textiles, food ingredients, mechanical components.

	Cycle B • I can measure, tape, cut and join materials with some accuracy. • I can work safely and accurately with a range of simple tools.
	Food:
	Cycle A • I know how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. • I understand how to prepare and cook predominantly savory dishes safely and hygienically including, where appropriate, the use of a heat source.
	Cycle B • I know how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. • I understand how to prepare and cook predominantly savory dishes safely and hygienically including, where appropriate, the use of a heat source.
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	Design For Manufacture:
	Cycle A • I can evaluate their products by carrying out appropriate tests. • I can start to evaluate their work during and at the end of the assignment.
	Cycle B • I can evaluate my product against original design criteria e.g. how well it meets its intended purpose.
	Creative Risk:
	Cycle A • I can evaluate their products by carrying out appropriate tests. • I can start to evaluate their work during and at the end of the assignment.
	Cycle B • I can evaluate the key designs of individuals in design and technology has helped shape the world. • 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.
	Food:
	Cycle A • I know that to be active and healthy, food and drink are needed to provide energy for the body.
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.	Design For Manufacture:
	Cycle A
	Cycle B
	Creative Risk:
	Cycle A • Know that structures need stable foundations and effective weight distribution.
	Cycle B • I know that mechanical systems such as axels allow the movement of wheels across a chassis.
	Food:
	Cycle A • I can understand how to prepare and cook predominantly savory dishes safely and hygienically including, where appropriate, the use of a heat source. • I know how to use a range of techniques such as peeling, chopping, slicing, grating and mixing. • I know that a healthy diet is made up from a variety and balance of different foods and I understand the content of sugars. • I know that to be active and healthy, food and drink are needed to provide energy for the body.

	Cycle B • I can understand how to prepare and cook predominantly savory dishes safely and hygienically including, where appropriate, the use of a heat source. • I know how to use a range of techniques such as peeling, chopping, slicing, grating and mixing. • I know that a healthy diet is made up from a variety and balance of different foods and I understand the content of sugars. • I know that to be active and healthy, food and drink are needed to provide energy for the body.
--	--

Assessment End Points Cycle A (Formerly Year 4)	
Knowledge	Skills
• I know how to use a range of cooking techniques such as peeling, chopping, slicing, grating and mixing. • I know that, for a structure to be stable, it requires good foundations and effective weight distribution. • I know how to measure, mark out, cut, score and assemble components with more accuracy. • I know that, for a structure to be stable, it requires good foundations and effective weight distribution. • I know that the design of a chair impacts its effectiveness	• I can prepare and cook predominantly savory dishes safely and hygienically including, where appropriate, the use of a heat source. • I can demonstrate willingness to change things if this helps me to improve my work. • I can generate ideas, considering the purposes for which I am designing. • I can prepare a savory dish that is part of a balanced diet which is made of healthy ingredients. • I can use a range of cooking techniques: mixing, measuring, selecting, blending • I can predict what a successful product looks like, considering its purpose, and evaluate it (against a criteria). • I can measure, mark out, and cut different materials with some accuracy.

Assessment End Points Cycle B (Formerly 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.