



## Design Technology Curriculum Overview Year 2



Concepts	User	Identify who the product is for and why it is useful. Compare alternatives of the same product	
	Implementation	Select and use a range of different techniques and tools. Consider the effectiveness of these.	
	Innovation	Generate, develop, model and communicate possible improvements Respond to design criteria.	
Cooking and Nutrition	Explore what makes a balanced diet and taste test combinations of different food groups before designing and making a wrap		
Context	Explore and learn what forms a balanced diet, pupils will taste test ingredient combinations from different food groups that will inform a wrap design of their choice which will include a healthy mix of protein, vegetables and dairy		
Design	Planning for a set brief, following simple criteria, designing a healthy wrap		
Make	Preparing food safely and hygienically, chopping and slicing safely using a bridge or claw grip.		
Evaluate	Conducting product research, trialling and feeding back on foods, taste, texture and aroma.		
Cooking and Nutrition	Identifying each of the food groups, understanding what makes a balanced diet, developing an awareness of hidden sugars in everyday foods.		
Vocabulary	Alternative, diet, balanced diet, evaluation, expensive, healthy, ingredients, nutrients, packaging, refrigerator, sugar, substitute		
Skills application	Reading - reading a letter and summarising the key points, Maths- Using inequalities signs (<=>) to compare sugar in drinks, using grams (g) to give weights, Science - Discussing the senses that humans have, having an awareness of food hygiene		
Recap	Be able to name fruit and vegetables.		
Structures	Experiment with different shapes and manipulate materials to explore and evaluate a range of structural properties. They apply this knowledge to their own design, make and test task.		
Context	Using the tale of Goldilocks and the Three Bears as inspiration, pupils help Baby Bear by making him a brand new chair, exploring different shapes and materials. When designing the chair, they consider his needs and what he likes.		
Design	Designing for others, using criteria and applying knowledge of structures through planning		
Make	Identifying flaws in a pre-modelled design and thinking about ways to fix or strengthen them, cutting and assembling accurately, selecting from materials based on their characteristics		
Evaluate	Exploring natural and man-made structures, testing and evaluating, analysing existing chairs including those by established designers		
Technical Knowledge	Understanding strength, stability and stiffness, knowing that different shapes can strengthen or weaken structures. Know materials can be manipulated to improve strength and stiffness.		
Vocabulary	Function, man-made, mould, natural, stable, stiff, strong, structure, test, weak		
Skills application	Reading - discussing the events from 'Goldilocks and the three bears', Maths - Creating 3D shapes from playdough, Recording totals on a tally chart, Science - Interpreting the results of the tip-test, Geography - Identifying natural and man-made structures		
Recap	Be able to design and make simple models, Be able to reflect by saying what they like and dislike about their product Be able to evaluate suitability of products they make.		

<b>Mechanisms</b>	Explore existing mechanisms in order to design, test and make their own big wheel style ride	
<b>Context</b>	After learning the terms: pivot, lever and linkage, pupils design a monster that will move using a linkage mechanism. Pupils practise making linkages and experiment with various materials to bring their monsters to life..	
<b>Design</b>	Using ICT to produce an inspiration board to review and annotate, designing mechanisms informed by research	
<b>Make</b>	Measuring and cutting accurately, working to scale and following a design brief, selecting materials based on their characteristics	
<b>Evaluate</b>	Testing and adapting mechanisms, researching mechanisms and existing products	
<b>Technical Knowledge</b>	Understanding and consolidating how an axle, axle holder and wheel work in harmony, understanding various properties of basic materials such as plastic, wood and metal.	
<b>Vocabulary</b>	Axle, decorate, evaluation, ferris wheel, mechanism, Stable, strong, test, waterproof, weak	
<b>Skills application</b>	Maths - Talking about 3d shapes and naming them correctly, Science- Discussing the properties of materials when choosing materials for their fairground wheel, Computing - Practising drag and drop skills by creating an inspiration board (extension activity)	
<b>Recap</b>	Be able to design and make simple models, Be able to reflect by saying what they like and dislike about their product, Be able to evaluate suitability of products they make.	