



Y4 Design and Technology

Design and Evaluate (DE)	Making (M)	Cookery and Nutrition (CN)
DE 1- I identify some of the great designers in all of the areas of study to generate ideas for designs.	M 1- Materials: I can measure and mark out to the nearest mm.	CN 1- I can prepare ingredients hygienically selecting and using appropriate utensils.
DE 2- I can disassemble products to understand how they work.	M 2- Materials I can apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs)	CN 2- I can measure ingredients to the nearest gram.
DE 3- I can collect information from a number of different sources and use this to inform design ideas in words, labelled sketches and models, keeping in mind fitness for purpose and the end user.	M 3- Textiles I can understand the need for a seam allowance	CN 3- I can assemble and cook ingredients.
DE 4- I can make realistic step by step plans, reflecting on designs as the product develops.	M 4- Electricals and Electronics I can build models incorporating motors within the circuits.	CN 4- I can use a range of cooking techniques (controlling the temperature of the oven or hob, if cooking).
DE 5- I can use ICT software to create alternatives for an initial design.	M 5- Construction I can join materials using suitable techniques (screwing)	CN 5- I can make healthy eating choices and explain why.
DE 6- I can explain how the product is useful to the user.	M 6- Mechanics I can use pulleys, levers and linkages in my products.	CN 6- I can explain some of the processes that foods go through to preserve /make them more appealing.
DE 7- I can refine work and techniques – evidencing and explaining the results of research as work progresses, continually evaluating the product design (use peer market research to evaluate and improve products at different stages of the design process)	M 7- Computing I can control and monitor models using software designed for this purpose.	

Autumn 1 Jungle Journey	Autumn 2 A Magical Place	Spring 1 Rotten Romans	Spring 2 Vicious Volcanoes	Summer 2 The Vile Victorians	Summer 2 Wonderful Water
	DE1 DE2 DE3 DE4 DE6 DE7 M1 M2 M4 M5 M6	DE1 DE2 DE3 DE4 DE5 DE6 DE7 M1 M2 M4 M5	CN1 CN2 CN3 CN5	DE1 DE2 DE3 DE4 DE5 DE6 DE7 M1 M2 M3 M5	M1 M2 M7 CN1 CN2 CN3 CN5



Vocabulary

Designing, Evaluating, Making

Explore, object, product, construct, deconstruct, design, existing designs, identify, purpose, audience (intended user), draw, sketch, label, computer software, select, tools, junior hacksaw, clamp, screw, screwdriver, materials, wood, card, paper, fabric, running stitch, back stitch, needle, thread, cotton, wheels, axles, suggest, evaluate, clear purpose, discuss, share, improve, fit for purpose, justify choice, adapt, refine, measure, cm, mm, designers, circuits, buzzers, bulbs, wires, cells, batteries

Cooking and Nutrition

Hygiene, safe, balanced diet, protein, dairy, oils, fats, carbohydrates, fat, sugar, salt, recipe, measure, scales, grams (g), kilograms (kg), utensils, knife, teaspoon, tablespoon, *temperature, centigrade, preserve, dried, dehydrate, tinned, frozen, pickled*

I will know....	I will know....	I will know....
<ul style="list-style-type: none"> ○ the names of a designer and what they designed ○ why it is useful to disassemble products to find out how they have been constructed ○ how to use information I have collected to inform my own designs ○ why I need to ensure my design is fit for purpose ○ how to use labelled sketches, words and models to show my initial designs ○ why I will use electrical circuits within some models ○ how to create a circuit to ensure a motor works ○ what levers, pulleys and linkages are ○ how I can use levers, pulleys and linkages in my design ○ 	<ul style="list-style-type: none"> ○ how to use what I know about the end user to inform my design ○ how to measure to the nearest mm when marking on my design ○ what cutting or shaping techniques I have used ○ what equipment I will need when screwing (screwdriver, screws, wood) ○ how to stay safe when using screws to join wood together ○ why it is important to wash the area and my hands before working with food ○ how to measure ingredients to the nearest gram ○ how to assemble ingredients carefully (Such as not spilling ingredients that have already been weighed and doing it in the correct order) ○ what a balanced diet is and what makes some foods healthier than others 	<ul style="list-style-type: none"> ○ the names of different designers and what they have designed ○ why it is useful to disassemble products to see how they work ○ how my product is useful to the user ○ how to explain to others why I have changed my design (Such as new research or opinions of others) ○ why I have chosen the cutting and shaping techniques I have used (Such as slots or cut outs) ○ which stitch I have used when sewing ○ how to leave a seam allowance and why this is important ○ how to control models using computer software ○ which utensils I will need when cooking ○ how to cook ingredients (Such as why temperature and stirring/not stirring is important) ○ why I have made healthy choices and why this is important