

# Design & Technology (Year 7)

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Term: Toys Toys Toys					Term Interactive Card					Term CAFE Cooking and Nutrition													
Strands	Communicate & present information in a variety of ways	Analyse and evaluate a range of products	Make a quality product	Apply understanding of technical and scientific knowledge	Use equipment correctly and work safely in Design and Technology	Strands	Communicate & present information in a variety of ways	Design, problem solve and develop ideas creatively	Make a quality product	Apply my understanding of technical and scientific knowledge	Use equipment correctly and work safely in Design and Technology	Strands	Communicate & present information in a variety of ways	Design, problem solve and develop ideas creatively	Analyse and evaluate a range of products	Make a quality product using equipment correctly and safely	Apply my understanding of technical and scientific knowledge						
I Can Statements	I can identify and reformulate design problems	I can research to identify user needs	I can make a wooden toy using materials and equipment provided	I can understand the properties of materials	I can make things using a variety of processes	I Can Statements	I can develop and communicate ideas	I can test, evaluate and refine my own products	I can make a quality interactive cards	I can understand the properties of paper and card	I can work safely in an organised way	I Can Statements	Write a set of instructions	I can test, evaluate and refine my own products	Use Sensory Testing to analyse and test products	I can make things using a variety of processes	I can understand the principles of nutrition & healthy eating						
I Can Statements		I can analyse products made by others		I can understand the impact of D&T on people and the environment	I can work safely in an organised way	I Can Statements			I can understand how mechanical systems enable changes in movement and force	I can understand how electrical and electronic systems can be used in my products		I Can Statements				I can work safely in an organised way	I can understand the source and seasonality of food products						
I Can Statements						I Can Statements						I Can Statements				I can use tools and equipment	I can understand the properties of materials						
Mastery Statements					Emerging	Developing	Mastery			Mastery Statements					Emerging	Developing	Mastery						
I can identify and reformulate design problems	Analyse the design brief using the 5Vs	Re-write a design brief in my own words, adding details from the analysis	Apply research to write detailed design criteria	I can develop and communicate ideas	Draw design ideas neatly and clearly communicate ideas in books	Draw design ideas, and annotate them identifying key features of different pop up mechanisms, measurements	Annotate design ideas looking at target audiences and is suitability	Write a set of instructions	Generate clear headings for ingredients and equipment. Sequenced instructions.	Use of imperative verbs to explain actions to take.	Use of diagrams and pictures	I can research to identify user needs	Find out about toys; who uses them and where they are sold	Find information from various sources about toys; where and how they are made, who buys them, who uses them, key features such as how toys are used for learning	Evaluate research and summarise the key points so that it can be applied to designs	Experiment making different pop ups, explain how they can be used in my own making	Test a range of pop up ideas	Independently test different pop up mechanism that are suitable for your design ideas and explain their suitability to the design	I can test, evaluate and refine my own products	Identify what was good and bad about my products	Compare my products to success criteria	Compare my products to success criteria and suggest how to improve them	
I can analyse products made by others	Describe products making use of all senses to support the description	Evaluate products against criteria, showing an understanding of the difference between a description and an evaluation	Compare products and give a justified conclusion	I can make a quality interactive cards	Develop 3 pop up cards using 2 different pop up techniques	Develop 3 pop ups using a range of pop up techniques focusing on a target audience and a specific theme	Develop 3 pop ups using independent research on different pop up styles and applying these ideas to own designs.	Use Sensory Testing to analyse and test products	Use a range of success criteria which includes taste, texture, colour and smell.	Apply success criteria to the evaluation of the product and identify areas for improvement.	Suggest improvements to the ingredients or method to improve the quality of outcome.	I can make a wooden toy using materials and equipment provided	Mark out and cut materials (rough cut shapes from the pine block)	Also shape, smooth and join materials to make a basic product (smooth, well shaped with axes and cotton reel wheels)	Also join and finish materials to make a high quality product (smooth with rounded edges and wheels made from wood)	I can understand the properties of paper and card	State the names of different types of paper and card	Identify the properties of different type of paper and card	Explain where the paper and card can be used and why it is suitable	I can make things using a variety of processes	Make food products by using the skills of chopping, assembling, mixing, shaping & baking.	Make food products by also using the skills of boiling & grilling	Make food products with a good quality finish by using a variety of skills precisely
I can understand the properties of materials	Recall the overview of materials, showing the main categories and links between types	Explain the differences between types of wood and relate the properties to the type of tree it comes from	Compare wood & plastic referring to working characteristics; cutting, shaping, joining and finishing	I can understand how mechanical systems enable changes in movement and force	State the different type of motions and identify on a given product what type of motion is at play	Identify the different types of mechanisms and recognise them on real life products	Explain how mechanical systems enable changes in movement on existing products	I can work safely in an organised way	Recall H&S rules to get myself ready to cook and do the basic clearing up identify & explain the consequences of not following the H&S rules	Apply the H&S rules to work safely to prepare, cook and tidy away	Take collective responsibility & work in a team to prepare, cook and tidy away	I can understand the impact of D&T on people and the environment	Recall and describe ways to support the environmentally friendly use of materials	Explain how the 6Rs can be applied when designing products	Evaluate the differences between products made in eco-friendly, sustainable ways and those made quickly and cheaply	I can understand how electrical and electronic systems can be used in my products	State the different tools, equipment and component and recognise the symbol used for each component.	Describe how a circuit works using correct terminology and read a circuit diagram and if it will function correctly	Explain how the circuit in my making would work and recognise if and how to correct any problems.	I can use tools and equipment	Prepare ingredients with a measuring jug and measuring spoons Use scales with help List the 3 methods of heat transfer in cooking, convection, conduction & radiation	Use scales, measuring jug and measuring spoons accurately to prepare ingredients Describe which parts of the cooker use the 3 methods	Use parts of the cooker effectively, including tests for readiness Explain how heat is transferred when cooking different types of food Apply heat transfer information to being
I can make things using a variety of processes	Use hand tools (tri-square, tenon & coping saws, hand files)	Use machine tools (belt sander, Hegner saw and pillar drill)	Use processes to make high quality products which are well finished	I can work safely in an organised way	Get myself ready for practical lesson and do the basic clearing up	Work safely to prepare and tidy away	Take collective responsibility & work in a team to prepare and tidy away	I can understand the principles of nutrition & healthy eating	Recall the rules of healthy eating	Explain the rules of healthy eating beyond 'it's healthy or unhealthy' State the names and sources of the micro & macro nutrients	Apply the rules of healthy eating when suggesting new ideas Categorise the function of the nutrients in major food groups	I can work safely in an organised way	Work on my own in a safe and organised way	Work with others in my group in a safe and organised way	Take responsibility for working in a safe and organised way within the class group	I can work safely in an organised way	Get myself ready for practical lesson and do the basic clearing up	Work safely to prepare and tidy away	Take collective responsibility & work in a team to prepare and tidy away	I can understand the source and seasonality of food products	State where fruits, vegetables & cereals come from Describe different types of vegetable	Explain how the climate and time of year affects the source of food	Investigate and explain the importance of eating locally produced, seasonal food
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