



Design and Technology

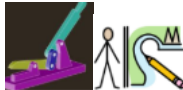


Key Stage 1

Unit	Textiles  Templates and Joining (Hand Puppet)	Mechanisms  Sliders and Levers (Moving Picture)	Food and Nutrition  Preparing Fruit and Vegetables (Fruit Kebab)
National curriculum Purpose of Study & Aims	Purpose of study Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation. Aims The National Curriculum for Design and Technology aims to ensure that all pupils: • develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world • build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users • critique, evaluate and test their ideas and products and the work of others • understand and apply the principles of nutrition and learn how to cook.		
National Curriculum: Key Stage 1	Key stage 1: Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment]. When designing and making, pupils should be taught to: Design • design purposeful, functional, appealing products for themselves and other users based on design criteria		

	- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology Make - select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] - select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics Evaluate - explore and evaluate a range of existing products - evaluate their ideas and products against design criteria Technical knowledge - build structures, exploring how they can be made stronger, stiffer and more stable - explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. Cooking and Nutrition As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life. Pupils should be taught to: - use the basic principles of a healthy and varied diet to prepare dishes - understand where food comes from.		
Title of Unit (Enquiry Question)	How can we use templates and joining to make things out of fabric?	How can sliders and levers make a picture move?	How can we design and make a healthy fruit snack that everyone will enjoy?
Theme	Textiles - templates and joining	Mechanisms - slider and levers	Food – preparing fruit and vegetables
Knowledge	Lesson 1 Evaluate and research existing products - I know that textile products are made from fabrics and are joined together in different ways to suit a purpose Lesson 2 Design own product - I know that a template is used to mark out a shape on fabric so that it can be cut accurately. Lesson 3 Focused practical tasks -	Lesson 1 Evaluate and research existing products - I know that moving pictures use sliders and levers to help tell a story. Lesson 2 Design own product - I know that I can use drawings to show where my moving parts will go and what they will do. Lesson 3 Focused practical tasks - I know how to safely use slots and bridges to make a slider and a split pin to make a lever.	Lesson 1 Evaluate and research existing products - I know that fruits and vegetables are part of a healthy diet and can be prepared in different ways to make a snack. Lesson 2 Design own product - I know that I can plan a snack by choosing ingredients and drawing a picture to show how they will look. Lesson 3 Focused practical tasks -

	I know how to safely use fabric scissors to cut shapes and how to use joining methods like glue, staples, or large stitches. Lesson 4 Make your own product - I know that different fabrics feel and behave differently, and I know how to use templates to help me build my product. Lesson 5 Evaluate your own product - I know how to check if my joins are strong and if my finished product looks like the template I planned to use.	Lesson 4 Make your own product - I know that card is strong enough to make a lever and that pivots allow the different parts of my product to move. Lesson 5 Evaluate your own product - I know how to check if my mechanism moves smoothly and if it looks like the design I drew.	I know how to safely use peelers and knives using the correct grip and how to wash my hands before handling food. Lesson 4 Make your own product - I know the names of different fruits and vegetables and understand how to use tools to slice, peel or grate them safely. Lesson 5 Evaluate your own product - I know how to use my senses to talk about my snack and if it matches the plan I made.
Skills	Lesson 1 Evaluate and research existing products - I can talk about fabric objects and compare how they are joined together and what they feel like. Lesson 2 Design own product - I can draw a design and show how I will use a template to make the right shape. Lesson 3 Focused practical tasks - I can use a template to mark and cut fabric safely and practice different ways of joining it. Lesson 4 Make your own product - I can follow steps to cut out my fabric shapes and join them together to make a finished product. Lesson 5	Lesson 1 Evaluate and research existing products - I can look at moving books and pictures to see how sliders and levers work and say which ones I like best. Lesson 2 Design own product - I can draw a design and show where the pivots and slots will go. Lesson 3 Focused practical tasks - I can practise cutting straight slots and using split pins to make things move. Lesson 4 Make your own product - I can follow my plan to build a moving picture using bridges and sliders so different parts can move. Lesson 5 Evaluate your own product -	Lesson 1 Evaluate and research existing products - I can taste different fruits and vegetables and use simple words like 'crunchy' or 'sweet' to say what I like. Lesson 2 Design own product - I can draw a design for my healthy snack and pick which ingredients I want to use. Lesson 3 Focused practical tasks - I can follow a model to wash, peel, and slice food safely using the bridge or claw grip. Lesson 4 Make your own product - I can follow steps to prepare and arrange my ingredients to make a finished snack. Lesson 5 Evaluate your own product -

	Evaluate your own product - I can talk about how well my joins held together and if my product stayed the same shape as my template.	I can talk about how well my mechanisms move and compare my finished picture to my design.	I can talk about my finished snack and say how I could make it tastier or healthier next time.
Vocabulary	Fabric Template Pattern pieces Mark out Join Decorate Sew Design Make Evaluate	Slider Lever Pivot Slot Bridge Mechanism Paper fastener Push Pull Cut	Fruit Vegetables Healthy diet Peeling Slicing Ingredients Sensory (e.g., crunchy, sweet, juicy) Design Make Evaluate
Career Links	Clothing/Accessory Designer 	Mechanisms Designer 	Food Product Designer 
Focus Designer	Cath Kidston 	Robert Crowther 	Jamie Oliver 
Resources	- Existing products linked to the chosen project. - Variety of textiles such as dipryl, felt, and reclaimed fabric. - Thread, pins, and needles with magnets for safety. - Staplers, staples, and fabric glue. - Left and right-handed scissors. - Items for finishing such as buttons, wool, fabric paints, and sequins. - Drawing and colouring media	- Books and everyday products with levers and slider mechanisms. - Card strips, card rectangles, paper, and masking tape. - Paper fasteners and paper binders. - Stick glue and PVA glue. - Finishing materials and media. - Left and right-handed scissors, cutting mats, and card drills	- Range of fresh fruit and vegetables. - Chopping boards, knives, peelers, and graters. - Skewers, juicers, spoons, jugs, plates, and bowls. - Aprons and plastic table covers. - Hand washing and washing-up facilities. - Yogurt making machine or blender, if appropriate for your project.

Assessment



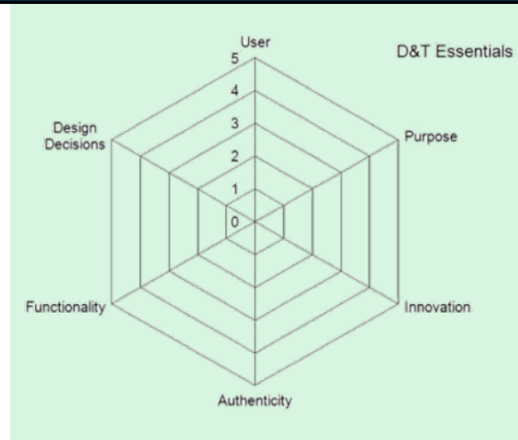
Year 1 - End of Unit Assessment



My Design Criteria

- User: A Child
- Purpose: Puppet Show
- My hand puppet is colourful and appealing.
- Children can use my hand puppet to retell a story.
- My hand puppet works properly because it fits my hand and the joints are strong.
- My hand puppet is made to be used in play or to help tell a story.

My Design Evaluation



Did I achieve my Design Criteria?

Yes ☐ No ☐ Partly ☐



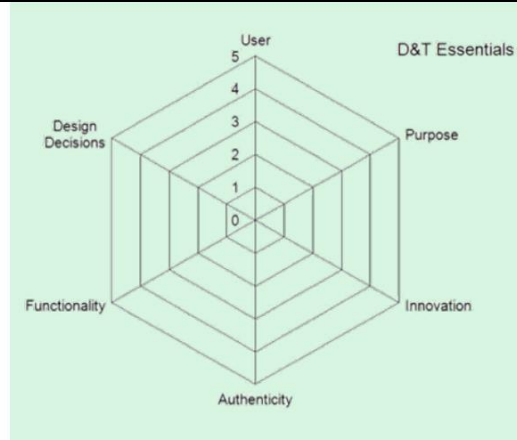
Year 1 - End of Unit Assessment



My Design Criteria

- User: A Child
- Purpose: Share a story – Perform to a friend
- My moving picture works well and is appealing to the user.
- My moving picture can be used to retell a part of a story or show an idea.
- My moving picture works properly because the slider or lever makes the part move.
- My moving picture is made to show a character or object moving to match my idea or story.

My Design Evaluation



Did I achieve my Design Criteria?

Yes ☐ No ☐ Partly ☐



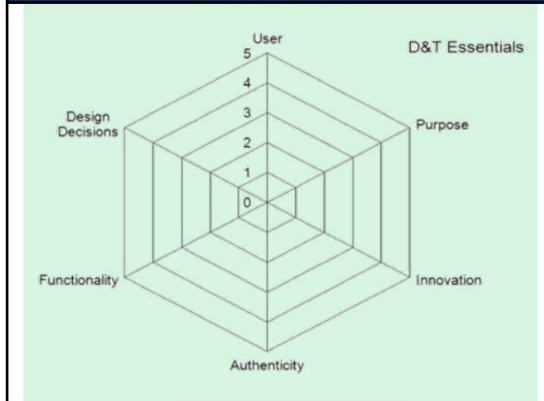
Year 1 - End of Unit Assessment



My Design Criteria

- User:
- Purpose:
- My fruit snack is healthy.
- My fruit snack is something that can be prepared safely by washing and cutting fruit.
- My fruit snack looks nice and tastes good.
- My fruit snack was made safely by keeping clean and using tools carefully.

My Design Evaluation



Did I achieve my Design Criteria?

Yes ☐ No ☐ Partly ☐