

Year 1 (A) Design Technology

	<u>Head</u>	<u>Hands</u>
Textiles Christmas Decorations	<ul style="list-style-type: none"> To explore different decorations 	<ol style="list-style-type: none"> Use scissors safely Cut lines accurately Cut out shapes accurately Sew two pieces of material together Attach buttons and other decorative materials onto a piece of fabric Use the tools needed for sewing safely and sensibly. Follow a design to make a completed product. Work safely and sensibly with the tools and materials
	<ul style="list-style-type: none"> To design a Christmas tree decoration 	
	<ul style="list-style-type: none"> Know what design criteria are. 	
	<ul style="list-style-type: none"> To evaluate a Christmas decoration 	
	<ul style="list-style-type: none"> Describe what materials, tools and skills they will need to make their decoration. 	
	<ul style="list-style-type: none"> Describe the steps needed to take to make a decoration. [1/2/3/4/5/6/7/8] 	
Mechanics Minibeasts	<ul style="list-style-type: none"> Explain how a sliding mechanism works [1/2/4/5] 	<ol style="list-style-type: none"> Make a moving picture using a sliding mechanism Combine and join materials to make their own lever and pivot mechanisms Cut out and join components to create a wheel mechanism Follow a design Work safely with a variety of tools and materials to create a moving mechanism
	<ul style="list-style-type: none"> Evaluate the sliding mechanisms they have made, and identify areas where they could be improved 	
	<ul style="list-style-type: none"> Understand the terms 'lever' and 'pivot'. [2] 	
	<ul style="list-style-type: none"> Explain how a lever and pivot mechanism works [2] 	
	<ul style="list-style-type: none"> Evaluate work and identify areas for future development [3] 	
	<ul style="list-style-type: none"> Design a moving picture 	
Food Seaside Snacks	<ul style="list-style-type: none"> To follow instructions to make sandwiches [1/2/3/4/5] 	Select appropriate ingredients. Effectively and safely use tools. Manipulate materials Shape fruits Joint items together
	<ul style="list-style-type: none"> Name different foods including fruits 	
	<ul style="list-style-type: none"> Select a variety of ingredients [1] 	
	<ul style="list-style-type: none"> Know why they should eat fruit 	
	<ul style="list-style-type: none"> Talk about their work 	
	<ul style="list-style-type: none"> Know what a balanced meal is 	

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Year 3 (A) Design Technology

	<u>Head</u>	<u>Hands</u>
Structures Picture Frames	<ul style="list-style-type: none"> To investigate free-standing structures and how they are made stable. [1] 	<ol style="list-style-type: none"> To be able to experiment with different strengthening and joining techniques. To be able to make a stable photograph frame from a design. To use tools safely and with increased skill
	<ul style="list-style-type: none"> To find different ways of strengthening and joining paper and card. [1/3] 	
	<ul style="list-style-type: none"> To investigate ways of making stable free-standing structures. [2] 	
	<ul style="list-style-type: none"> To be able to design a photograph frame for a particular purpose. [2] 	
	<ul style="list-style-type: none"> To be able to evaluate a finished product. 	
Food Seasonal Food	<ul style="list-style-type: none"> To know how seasonal fruits in Britain are grown and processed. 	<ol style="list-style-type: none"> To cook using British ingredients available all year round. To follow a recipe To measure accurately To work hygienically To clean and look after equipment
	<ul style="list-style-type: none"> To understand why vegetables form an important part of a healthy and varied diet. [1/2/3/4/5] 	
	<ul style="list-style-type: none"> To find out about how seasonally produced meat can form part of a healthy diet. [1/2/3/4/5] 	
	<ul style="list-style-type: none"> To know how fish are caught or reared, processed and used in healthy meals. [1/2/3/4/5] 	
Mechanics Torches	<ul style="list-style-type: none"> To identify the features of torches and investigate their uses [1] 	<ol style="list-style-type: none"> Create a simple circuit Create a torch casing from recycled materials. Follow a design to create a torch
	<ul style="list-style-type: none"> To investigate how to make an electrical circuit using different materials for switches [1] 	
	<ul style="list-style-type: none"> To investigate casings for a torch [2] 	
	<ul style="list-style-type: none"> To design a torch for a particular purpose 	
	<ul style="list-style-type: none"> To make a torch to meet the design criteria [1/2/3] 	
	<ul style="list-style-type: none"> To evaluate a finished product 	

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Year 5 (A) Design Technology

	<u>Head</u>	<u>Hands</u>
Food Gingerbread Houses	<ul style="list-style-type: none"> To investigate existing edible houses to inspire a design 	<ol style="list-style-type: none"> To construct a house out of edible resources To construct and decorate a house out of edible resources using a variety of tools. To follow a recipe To measure accurately To work hygienically To clean and look after equipment
	<ul style="list-style-type: none"> To use a computer to design a pattern template. [2] 	
	<ul style="list-style-type: none"> To test and improve a design [1/2/3/4/5/6] 	
	<ul style="list-style-type: none"> To evaluate their product against a design criterion. 	
Textiles Drawstring Bags	<ul style="list-style-type: none"> To investigate and analyse items made using textiles: the materials used and how they are made. [1] 	<ol style="list-style-type: none"> Draw pattern pieces. To use pattern pieces to measure, mark and cut fabric; To sew design elements according to a design. To join fabric pieces by hand sewing. To sew hems on an item made using textiles; To add design details.
	<ul style="list-style-type: none"> To know some ways in which textiles are joined and decorated. [1/2/3/4/5/6] 	
	<ul style="list-style-type: none"> To design an item made using textiles [1] 	
Mechanics Automated Animals (CAM)	<ul style="list-style-type: none"> Use research to develop design criteria centred on the design brief. 	<ol style="list-style-type: none"> Cut materials with precision to the nearest mm Refine the finish with appropriate tools (such as sanding wood after cutting). Make a model which is accurate, functions well and is a quality finish.
	<ul style="list-style-type: none"> Create a detailed design with at least two moving parts. 	
	<ul style="list-style-type: none"> Continually evaluate their work as it develops and at the end against design criteria and the design brief [1/2/3] 	
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Year 2 (B) Design Technology

	<u>Head</u>	<u>Hands</u>
Structure Kites	<ul style="list-style-type: none"> To explore the history of different kites and what they look like. [3] 	<ol style="list-style-type: none"> Make a simple Carp Kite by following instructions Construct a kite by following a design. Use appropriate materials to construct a kite.
	<ul style="list-style-type: none"> To explore materials used to make simple kites. [1/2] 	
	<ul style="list-style-type: none"> To explore designs of diamond kites. [2] 	
	<ul style="list-style-type: none"> To evaluate a piece of work they designed and created from scratch. [1/2] 	
Mechanics Vehicles	<ul style="list-style-type: none"> To explore modern fire engines. 	<ol style="list-style-type: none"> Follow a design to create a fire engine. Use a variety of materials and tools safely and effectively to create a fire engine.
	<ul style="list-style-type: none"> To investigate wheels, axles and chassis. [2] 	
	<ul style="list-style-type: none"> To be able to investigate ways of creating the body of a fire engine. [2] 	
	<ul style="list-style-type: none"> To be able to design a fire engine. [1] 	
	<ul style="list-style-type: none"> To be able to evaluate a finished product. 	
Food Pizzas	<ul style="list-style-type: none"> To find out what the favourite pizzas in the class are. 	<ol style="list-style-type: none"> To be able to make a food product based on a design. To follow a recipe To measure accurately To work hygienically To clean and look after equipment
	<ul style="list-style-type: none"> To examine, describe and categorise a variety of bread-based products. [1] 	
	<ul style="list-style-type: none"> To examine, describe and categorise a variety of pizza toppings. [1] 	
	<ul style="list-style-type: none"> To design a balanced healthy pizza. 	
	<ul style="list-style-type: none"> To be able to evaluate a food product based on a design. 	
	<ul style="list-style-type: none"> Consider healthy eating and complete a balanced plate. 	

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Year 4 (B) Design Technology

	<u>Head</u>	<u>Hands</u>
Textiles Juggling Balls	<ul style="list-style-type: none"> To investigate and evaluate existing juggling balls. 	<ol style="list-style-type: none"> Use appropriate techniques to decorate fabric. Create a hem using a running stitch and join fabrics using an overcast stitch Perform tie-dye as a technique for decorating my fabric. Cut around a template and use a running stitch to create a hem
	<ul style="list-style-type: none"> Develop a design based around design criteria 	
	<ul style="list-style-type: none"> Name and understand the use of different stitches. 	
	<ul style="list-style-type: none"> Research and trial different fillings for my juggling ball and decide upon the most functional one. 	
	<ul style="list-style-type: none"> Evaluate the final product. 	
	<ul style="list-style-type: none"> To investigate and evaluate existing juggling balls. Develop a design based around design criteria 	
Food American Food	<ul style="list-style-type: none"> To find out about the diversity of foods grown in America's diverse climates. [2/3] 	<ol style="list-style-type: none"> Develop cooking skills while following a recipe for a traditional American food. To work hygienically To clean and look after equipment
	<ul style="list-style-type: none"> To discover some ways in which indigenous Americans grew, caught, gathered, prepared, and cooked, food. 	
	<ul style="list-style-type: none"> To find out about important, traditional staple foods in America, and how the slave trade influenced American cuisine. [1/2/3] 	
	<ul style="list-style-type: none"> To learn about the cultural significance of chillies in Mexican cooking, and about how American food is heavily influenced by food from other cultures. [1/2/3] 	
	<ul style="list-style-type: none"> To consider why certain foods are unhealthy if eaten regularly, and recognise the value of eating food together [1/2/3] 	
Electrical Light up signs	<ul style="list-style-type: none"> To investigate and analyse illuminated signs. 	<ol style="list-style-type: none"> To use tools, equipment, materials and components to make the enclosure of a decorative illuminated sign. To construct a working circuit with one or more lights, and fit it in a decorative illuminated sign.
	<ul style="list-style-type: none"> To understand how LEDs may be used instead of traditional incandescent bulbs in series circuits. [1/2] 	
	<ul style="list-style-type: none"> To develop ideas for a decorative illuminated sign 	
	<ul style="list-style-type: none"> To select tools, equipment, materials and components to make the enclosure of an illuminated sign.[1/2] 	
	<ul style="list-style-type: none"> To investigate ways in which computers can be used to program and control lights in a product. [1/2] 	

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Year 6 (B) Design Technology

	<u>Head</u>	<u>Hands</u>
Food Burgers	• To explore side dishes and burger sauces. [3/4/5]	<ol style="list-style-type: none"> 1. Make burger patties 2. Make a complete burger 3. Work hygienically 4. Clean and look after equipment 5. To follow a recipe and measure ingredients accurately.
	• To explore types of burgers and their nutrition facts. [1/3/4/5]	
	• To identify suitability of burger buns	
	• Plan and design a burger	
	• Evaluate the process	
Structures Bridges	• To explore ways in which pillars and beams are used to span gaps. [2/3]	<ol style="list-style-type: none"> 1. To work collaboratively to produce a prototype according to an agreed design. 2. To be able to experiment with different strengthening and joining techniques. 3. Use a variety of materials and tools safely and effectively
	• To learn technical vocabulary to explain how beam bridges are constructed.	
	• To explore ways in which trusses can be used to strengthen bridges. [1/2/3]	
	• To explore ways in which arches are used to strengthen bridges. [1/2/3]	
	• To understand how suspension bridges are able to span long distances. [1/2/3]	
	• To develop criteria and design a prototype bridge for a purpose	
• To analyse and evaluate products according to design criteria.		
Programming Adventure map	• Understand how a floor robot moves and program/control floor robots. [1]	<ol style="list-style-type: none"> 1. Control floor robots. 2. Use a variety of materials and tools safely and effectively 3. To be able to experiment with different strengthening/joining
	• Explore and select from a range of different materials to create obstacle squares. [2]	
	• Program it accurately to move along a given route; [1]	
	• Generate ideas for an adventure map and appropriate obstacles matching an overall theme	
	• To analyse and evaluate products according to design criteria.	

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