

Design Technology	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Autumn 1		<b>Materials</b>  Design your own Traction Man		<b>Digestive System</b> Nutrition – Design and make a balanced meal including all food groups.	<b>Reversible and Irreversible changes</b> Investigate reversible and irreversible changes through cooking- eggs, pastry.	
Autumn 2	<b>Seasonal Changes</b> Make a healthy soup using seasonal vegetables.					
Spring 1			<b>Stone Age/ Iron Age</b> Design a stone age house. Look at different materials and structures.	<b>Sound</b> Design and make a musical instrument using junk modelling.		
Spring 2	<b>Toys</b>  Design and Make a Toy	<b>Healthy Eating</b>  Design and Make fruit Kebabs	<b>Animals including humans</b> Seasonal food and food groups. Design a springtime meal.			<b>Light</b> Create a papier mache lamp with a working circuit.
Summer 1					<b>Rainforests</b> Research sustainable materials that could be used in clothing to help tackle climate change (t-shirts).	<b>South America</b> Create a South American style salad, looking at how to grow different vegetables and how food should be stored.
Summer 2	<b>Materials</b> Design and make a space ship with moving parts to take Beegu back to space.	<b>Habitats</b> Design and make a mini greenhouse.	<b>Light</b> Use scrap materials to create a decorative light box.			

DT Y1	AUTUMN	AUTUMN	SPRING	SPRING	SUMMER	SUMMER
FOCUS		Seasonal Changes		Old and new toys within living memory.		Materials
QUESTION						
KEY KNOWLEDGE		<ul style="list-style-type: none"> <li>• Research vegetables which are currently in season. Use this knowledge to design and make a healthy seasonal soup.</li> <li>• Cut food safely.</li> </ul>		<ul style="list-style-type: none"> <li>• I can make a product which moves by exploring and using mechanisms such as wheels and levers.</li> <li>• I can make my model stronger</li> <li>• How to use scissors safely in order to cut.</li> </ul>		<ul style="list-style-type: none"> <li>• I can make a product which has moving parts.</li> <li>• Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</li> <li>• How to use tools safely in order to cut.</li> </ul>
TEXT						
<b>DEVELOPING, PLANNING AND COMMUNICATING IDEAS</b>	<p>Use my own ideas to make something.            Make a simple plan before making a product.            Explain how I want to make my product.</p>					
<b>WORKING WITH TOOLS, EQUIPMENT, AND MATERIALS AND COMPONENTS TO MAKE PRODUCTS.</b>	<p>Choose appropriate tools and resources.            Cut materials safely using the tools provided.            Describe the texture of foods.            Work safely in the kitchen.            Wash their hands and make sure that surfaces are clean</p>					
<b>EVALUATING PROCESSES AND PRODUCTS</b>	<p>Describe how something works.            Describe the materials they have used using different words.</p>					

DT Y2	AUTUMN	AUTUMN	SPRING	SPRING	SUMMER	SUMMER
FOCUS	Materials			Healthy Eating		Habitats
QUESTION						
KEY KNOWLEDGE	<ul style="list-style-type: none"> <li>Find out about the materials that are needed to make different toys.</li> <li>Measure materials to use in a model or structure.</li> <li>Use joining, folding or rolling to make materials stronger.</li> </ul>			<ul style="list-style-type: none"> <li>Measure and weigh using measuring cups or electronic scales.</li> <li>Understand where food comes from- seasonality.</li> </ul>		<ul style="list-style-type: none"> <li>Make sensible choices as to which materials to use for their greenhouse.</li> <li>Explore how they can make their greenhouse stronger, stiffer and more stable.</li> </ul>
TEXT						
<b>DEVELOPING, PLANNING AND COMMUNICATING IDEAS</b>	<p><b>Explore and evaluate a range of existing products.</b> Choose tools and materials and explain why I have chosen them.</p>					
WORKING WITH TOOLS, EQUIPMENT, AND MATERIALS AND COMPONENTS TO MAKE PRODUCTS.	<p>Be hygienic in the kitchen. Explain what it means to be hygienic. Measure materials to use in a model or structure. Describe the ingredients I am using. Describe the properties of the ingredients they are using.</p>					
EVALUATING PROCESSES AND PRODUCTS	<p>Describe the ingredients I have used. Explain what went well with their work and if they did it again, what would they want to improve?</p>					

DT Y3	AUTUMN	AUTUMN	SPRING	SPRING	SUMMER	SUMMER
FOCUS			Stone Age/ Iron Age	Animals including humans		Light
QUESTION						
KEY KNOWLEDGE			<ul style="list-style-type: none"> <li>• Select from and use a wider range of tools and equipment to create a stone age house [for example, cutting, shaping, joining and finishing], accurately.</li> <li>• Work accurately to measure, make cuts and make holes.</li> </ul>	<ul style="list-style-type: none"> <li>• Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</li> <li>• Use their knowledge of seasonality to design a springtime meal.</li> </ul>		<ul style="list-style-type: none"> <li>• Use the most appropriate scrap materials to create a decorative light box.</li> <li>• Use electrical systems in their products. For example, can they use a simple circuit?</li> </ul>
TEXT						
<b>DEVELOPING, PLANNING AND COMMUNICATING IDEAS</b>	<p>Research stone age habitats.            Develop a design criteria to inform the design of an innovative, functional house that is fit for purpose and aimed at people from the stone age.            Can they set out to grow plants such as cress and herbs from seed with the intention of using them for their food product?</p>					
WORKING WITH TOOLS, EQUIPMENT, AND MATERIALS AND COMPONENTS TO MAKE PRODUCTS.	<p>Choose the most appropriate materials.            Can they choose the right ingredients for a product?            Can they use equipment safely?            Can they make sure that their product looks attractive?            Can they work accurately to make cuts and holes?</p>					
EVALUATING PROCESSES AND PRODUCTS	<p>Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.            understand how key events and individuals in design and technology have helped shape the world.            Prove that my design meets set criteria.</p>					

DT Y4	AUTUMN	AUTUMN	SPRING	SPRING	SUMMER	SUMMER
FOCUS	Digestive System		Sound			
QUESTION						
KEY KNOWLEDGE	<ul style="list-style-type: none"> <li>Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</li> <li>Understand and apply the principles of a balanced and varied diet to designing and making a savoury meal.</li> </ul>		<ul style="list-style-type: none"> <li>Use junk modelling to design an innovative, functional, appealing musical instrument that is fit for purpose.</li> <li>Can they show a good level of expertise when using a range of tools and equipment?</li> </ul>			
TEXT						
<b>DEVELOPING, PLANNING AND COMMUNICATING IDEAS</b>	<p>Can they tell if their finished product is going to be good quality?          Have they thought what they can do to present their product in an interesting way?          Investigate and analyse a range of existing products.          Can they produce a plan and explain it to others?</p>					
WORKING WITH TOOLS, EQUIPMENT, AND MATERIALS AND COMPONENTS TO MAKE PRODUCTS.	<p>Do they know what to do to be hygienic and safe?          Can they explain how to join things in a different way?          Can they measure carefully so as to make sure they have not made mistakes?</p>					
EVALUATING PROCESSES AND PRODUCTS	<p>Can they suggest some improvements and say what was good and not so good about their original design?          Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.          Can they evaluate their product, thinking of both appearance and the way it works?          How have they attempted to make their product strong?</p>					

DT Y5	AUTUMN	AUTUMN	SPRING	SPRING	SUMMER	SUMMER
FOCUS	Reversible and Irreversible Changes				Rainforests	
QUESTION						
KEY KNOWLEDGE	<ul style="list-style-type: none"> <li>Design and create a savoury dish that incorporates both reversible and irreversible changes.</li> <li>Understand and apply the principles of a healthy and varied diet.</li> </ul>				<ul style="list-style-type: none"> <li>Research sustainable materials that could be used to make clothing.</li> <li>Design and make a sustainable t-shirt.</li> </ul>	
TEXT						
<b>DEVELOPING, PLANNING AND COMMUNICATING IDEAS</b>	<p>Can they produce a detailed step-by-step plan, including the cost of ingredients?  Investigate and analyse a range of existing products.  Understand how key events and individuals in design and technology have helped shape the world.  Use computer-aided design to create their final t-shirt design.  Come up with different ideas after collecting information from different sources.</p>					
WORKING WITH TOOLS, EQUIPMENT, AND MATERIALS AND COMPONENTS TO MAKE PRODUCTS.	<p>Can they use a range of tools and equipment expertly?  Can they make up a prototype first?</p>					
EVALUATING PROCESSES AND PRODUCTS	<p>How have they presented their product well?  Can they evaluate appearance and function of their product against the original criteria?  How have they made their product attractive and strong?</p>					

DT Y6	AUTUMN	AUTUMN	SPRING	SPRING	SUMMER	SUMMER
FOCUS				Light	South America	
QUESTION						
KEY KNOWLEDGE				<p>Work within a budget to design and make an innovative, functional papier mache lamp with a working circuit.</p> <p>Children to use different kinds of circuits in their product.</p>	<p>Understand and apply the principles of a healthy and varied diet to create a South American style salad.</p> <p>Consider culture and society in my product.</p> <p>Consider growing my own products, taking account of the time required to grow different foods.</p>	
TEXT						
<b>DEVELOPING, PLANNING AND COMMUNICATING IDEAS</b>	<p>Investigate and analyse a range of existing products to inform their design.            Can they use a range of information, along with market research to inform their design?            Show that I can consider culture and society in my plans and designs.</p>					
<b>WORKING WITH TOOLS, EQUIPMENT, AND MATERIALS AND COMPONENTS TO MAKE PRODUCTS.</b>	<p>Understand and use different electrical systems in their product.            Ensure my product has a high quality finish.            Follow and refine my plans.</p>					
<b>EVALUATING PROCESSES AND PRODUCTS</b>	<p>Test and evaluate my product against a clear criteria.            Evaluate whether their product is fit for purpose and consider what would improve it.            Consider how their product could be sold.</p>					

# YEAR 1 DT: TOYS (SPRING 2)

## KEY QUESTIONS/LEARNING CHALLENGES

LC1

LC2

LC3

LC4

LC5

LC6

LC7

# YEAR 1 DT: MATERIALS (SUMMER 2)

## KEY QUESTIONS/LEARNING CHALLENGES

LC1

LC2

LC3

LC4

LC5

LC6

LC7

# YEAR 2 DT: MATERIALS (AUTUMN 1)

## KEY QUESTIONS/LEARNING CHALLENGES

LC1

LC2

LC3

LC4

LC5

LC6

LC7

# YEAR 2 DT: HEALTHY EATING (SPRING 2)

## KEY QUESTIONS/LEARNING CHALLENGES

LC1

LC2

LC3

LC4

LC5

LC6

LC7

# YEAR 2 DT: HABITATS (SUMMER 2)

## KEY QUESTIONS/LEARNING CHALLENGES

LC1

LC2

LC3

LC4

LC5

LC6

LC7

# YEAR 3 DT: MATERIALS/STRUCTURE (SPRING 1)

## KEY QUESTIONS/LEARNING CHALLENGES

LC1

LC2

LC3

LC4

LC5

LC6

LC7

# YEAR 3 DT: FOOD (SUMMER 2)

## KEY QUESTIONS/LEARNING CHALLENGES

LC1

LC2

LC3

LC4

LC5

LC6

LC7

# YEAR 4 DT: NUTRITION (AUTUMN 1)

## KEY QUESTIONS/LEARNING CHALLENGES

LC1

LC2

LC3

LC4

LC5

LC6

LC7

# YEAR 4 DT: JUNK MODELLING (SPRING 1)

## KEY QUESTIONS/LEARNING CHALLENGES

LC1

LC2

LC3

LC4

LC5

LC6

LC7

# YEAR 5 DT: COOKING (AUTUMN 1)

## KEY QUESTIONS/LEARNING CHALLENGES

LC1

LC2

LC3

LC4

LC5

LC6

LC7

# YEAR 5 DT: SUSTAINABLE MATERIALS (SPRING 1)

## KEY QUESTIONS/LEARNING CHALLENGES

LC1

LC2

LC3

LC4

LC5

LC6

LC7

# YEAR 6 DT: PAPIER MACHE (SPRING 2)

## KEY QUESTIONS/LEARNING CHALLENGES

LC1

LC2

LC3

LC4

LC5

LC6

LC7

# YEAR 6 DT: HEALTHY FOOD (SPRING 1)

## KEY QUESTIONS/LEARNING CHALLENGES

LC1

LC2

LC3

LC4

LC5

LC6

LC7