



**SPARK**  
EDUCATION TRUST



# Whinstone Primary School

## DESIGN AND TECHNOLOGY

## **DESIGN TECHNOLOGY INTENT**

“Design is a funny word. Something people think design is how it looks, but of course if you dig deeper, it is really how it works.” Steve Jobs

Our Design Technology Curriculum will provide our children with a wide range of experiences, allowing us to nurture and grow their creativity and equip them with relevant skills for life in our rapidly changing technological world.

We want our children to be inspired by a range of professionals including engineers, designers, architects and chefs and have high aspirations for their futures.

We encourage children to use their creativity and imagination, to design and make products using a wide range of tools and equipment that solve real and relevant problems with a variety of contexts.

We believe that design technology helps prepare children in a developing world and encourages them to become curious and creative problem solvers both as individual and as part of a team.

## **DESIGN TECHNOLOGY IMPLEMENTATION**

Design and Technology is implemented through a carefully sequenced curriculum that aligns with the National Curriculum and in many areas goes beyond. Our curriculum builds technical knowledge, practical skills, and creativity from EYFS to Year 6. Pupils follow a clear design–make–evaluate cycle, applying learning from maths, science, and computing in purposeful projects. Vocabulary is explicitly taught, and high-quality resources support accurate modelling and construction. Teachers demonstrate techniques clearly and ensure pupils develop independence, resilience, and safe working habits. Regular opportunities for problem-solving, testing, and improving prototypes help pupils think like real designers. Learning is revisited and built upon so all pupils make strong, sustained progress.

## **DESIGN TECHNOLOGY IMPACT**

The impact of our Design and Technology curriculum is that pupils leave primary school as confident, creative problem-solvers who can design, make, and evaluate products with accuracy and purpose. They apply technical knowledge independently, use subject-specific vocabulary confidently, and demonstrate resilience when improving their work. Regular opportunities to test and refine prototypes enable pupils to think critically and reflect on real-world functionality. Assessment shows strong progress for all groups, including SEND, with pupils building a secure understanding of structures, mechanisms, electrical systems, and food technology. Pupils are well-prepared for KS3 and show genuine enjoyment of practical learning.

**DESIGN TECHNOLOGY UNIT LONG TERM PLAN ROADMAP**

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>EYFS</b>	<p><b>All About Me</b></p> <p>Children are exploring their initial use of tools and using materials.</p>		<p><b>Planet Earth</b></p> <p>Children are progressing in their use of tools with increasing accuracy. Children are starting to develop their design and constructing skills.</p>		<p><b>World of Books</b></p> <p>Children are now using their designs and creations to evaluate and explain processes they have used.</p>	
<b>Year 1</b>	<p><b>Textiles - Make a book with different materials (That's not my...)</b></p> <p>My niece really likes the 'That's not my...' books, but she wants a unique one, can we help?</p>  <p>Anne Kelly</p>		<p><b>Construction – Toy Makers Workshop:</b></p> <p>How can we make a toy from recycled materials that is fun and safe to play with?</p>  <p>Hasbro _____</p>		<p><b>Cooking and Nutrition - Plant Power:</b></p> <p>Snack like Jack – What tasty plant snacks help us to grow strong like Jack?</p>  <p>Dr Megan Rossi</p>	
<b>Year 2</b>	<p><b>Construction – Rebuilding History:</b></p> <p>How can we build strong and stable houses like those from the time of the Great Fire of London?</p>  <p>Taylor Wimpey</p>		<p><b>Textiles – Buzzing Bookmarks:</b></p> <p>How can you make a bookmark that's both fun and useful?</p>		<p><b>Cooking and Nutrition – Super Veggies to the rescue</b></p> <p>How can we make veggies fun and delicious?</p>  <p>Joe Wicks</p>	

		 <p>Louis Bourgeois</p>	
<p><b>Year 3</b></p>	<p><b>Construction - Strengthening paper/cardboard structures-cake box-ribbing, lamination and corrugation</b></p>  <p>Local bakery has been in touch to say that they are struggling to package their cakes without them getting squashed, can we help them create a sturdier box?</p> <p>Soigne Bakery – Ingleby Barwick</p>	<p><b>Cooking and Nutrition – Chocolate that cares</b></p> <p>How can we make a chocolate treat that is fair for people and kind to the planet?</p>  <p>Heston Bloomethal</p>	<p><b>Textiles – Stone Age Mysteries:</b></p> <p>How can you make the perfect pouch for a Stone Age adventure?</p>  <p>Fjallraven</p>
<p><b>Year 4</b></p>	<p><b>Textiles – Bag a story</b></p> <p>How can we create a functional and creative book bag?</p>  <p>Osprey Bags</p>	<p><b>Construction – Greek Vases</b></p>  <p>How did the Greeks make such elaborate vases?</p> <p>Historical context of Greek vase making processes</p>	<p><b>Cooking and Nutrition-Root and shoot</b></p> <p>What summer dishes can we make with root vegetables?</p> 

<p><b>Year 5</b></p>	<p><b>Construction – Fair Tale engineering</b>          How can we use pulleys and levers to solve a problem?</p> <p>Wilkinson Eyre Architects and Gifford and Partners</p>	<p><b>Textiles – Moonlit magic</b>          How can fabric and stitching create atmosphere?</p> <p>Lenore Tawney</p>	<p><b>Food and Nutrition – Central America on a plate</b>          How can we cook a dish that celebrates its cultural flavours?</p> <p>Daniela Soto-Innes</p>
<p><b>Year 6</b></p>	<p><b>Construction – Creating Anderson Shelters</b>          How did people in WWII protect themselves?</p> <p>William Paterson and Oscar Carl Kerrison</p>	<p><b>Construction- Electrifying Creations</b> How can we combine and design to create a spooky Gothic Themed model?</p> <p>Antoni Gaudi</p>	<p><b>Textiles – Trash to Treasure</b>          How can you transform old materials into something new and amazing?</p> <hr/> <p><b>Summer 2 – Food and Nutrition</b>          How can we mix recipes to invent an exciting new food?</p> <p>Wolfgang Puck</p>

## DESIGN TECHNOLOGY Curriculum Overview

### Early Learning Goals and National Curriculum Aims:

Early Years Foundation Stage:		
<p><b>EYFS Linked Areas of Learning:</b></p> <p>The most relevant statements for Design Technology are taken from the following areas of learning:</p> <ul style="list-style-type: none"> <li>• <b>Understanding the World</b></li> <li>• <b>Expressive Arts and Design</b></li> <li>• <b>Communication and Language</b></li> </ul>	<p><b>Early Learning Goal: Physical Development (Fine Motor Skills)</b> - Use a range of small tools, including scissors, paintbrushes and cutlery.</p> <p><b>Early Learning Goal: Expressive Arts and Design (Creating with Materials)</b> - Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</p> <ul style="list-style-type: none"> <li>• Share their creations, explaining the process they have used.</li> </ul>	<p><b>'Year 1 Ready' Goals:</b></p> <ul style="list-style-type: none"> <li>-To use a range of creative tools (scissors, paintbrushes, stamps, rollers etc) to create with a purpose in mind.</li> <li>-To talk to a peer or adult about their creations explaining the process that led to a finished product.</li> <li>-To have an awareness of how to operate simple cooking tools (knife and fork, wooden spoons, whisks etc) to create a food-based product by following instructions.</li> </ul>

Key Stage 1
<p>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].</p> <p>When designing and making, pupils should be taught to:</p> <p><b>Design</b></p> <ul style="list-style-type: none"> <li>• design purposeful, functional, appealing products for themselves and other users based on design criteria</li> <li>• generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</li> </ul> <p><b>Make</b></p> <ul style="list-style-type: none"> <li>• select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</li> <li>• select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</li> </ul> <p><b>Evaluate</b></p> <ul style="list-style-type: none"> <li>• explore and evaluate a range of existing products</li> <li>• evaluate their ideas and products against design criteria</li> </ul> <p><b>Technical knowledge</b></p> <ul style="list-style-type: none"> <li>• build structures, exploring how they can be made stronger, stiffer and more stable</li> <li>• explore and use mechanisms [for example, levers, sliders, wheels and axles] in their products</li> </ul>

## Key Stage 2

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, school, leisure, culture, enterprise, industry and the wider environment].

When designing and making, pupils should be taught to:

### Design

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

### Make

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

### Evaluate

- investigate and analyse a range of existing products
- 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

### Technical knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- apply their understanding of computing to program, monitor and control their products

## **Design and Technology Rationale for Teaching:**

### **EYFS:**

In the Early Years children are introduced to a range of familiar and unfamiliar materials. Children have opportunities to explore and select materials to use and begin to understand how to modify and join them. Through teacher and child led learning, we develop children's fine motor skills, gross motor skills and creative development. EYFS is an introduction to researching, designing, making, evaluating and understanding the technical knowledge for KSI. Therefore, teacher instruction focuses around the basic skills of cutting, sticking, joining and constructing.

### **Year 1**

#### **Autumn: Textiles - Make a book with different materials**

##### **(That's not my...)**

Children in the Early Years have studied Design and Technology throughout the Early Years Curriculum. Children have discussed a range of designers and jobs within DT. They have also created products using a range of materials. Therefore, it is important that children start in year 1 exploring with familiar materials. This topic introduces children to fabric through simple collage. They learn to cut and arrange fabric shapes, independently use joining techniques, and talk about colour, pattern and texture. This topic sets the foundation for use of materials throughout their design and technology journey. The concept of books is also supports children by putting DT into a context they are familiar with.

#### **Spring: Construction – Toy Makers Workshop:**

How can we make a toy from recycled materials that is fun and safe to play with?

Children in the Early Years have studied Design and Technology through construction on a daily basis. This topic introduces basic construction using everyday materials; explores stability using joining methods and simple mechanisms such as wheels and axles. This allows for their KSI DT journey to start within a context they are already familiar with. Children in Year 1 study about how toys have change in living memory, therefore providing historical context and scaffolding to their DT topic. Children will also focus on 'safety' within design an technology. This will be consolidated and returned to within all DT modules.

#### **Summer: Cooking and Nutrition - Plant Power:**

Snack like Jack – What tasty plant snacks help us to grow strong like Jack?

Children in the Early Years study food use and making on a weekly basis and therefore studying this topic allows children to build on their food construction skills. This topic introduces simple, healthy food preparation with familiar fruits and vegetables. Children learn the basics of hygiene, safe cutting, and begin to understand where food comes from. It is also important to know that this topic is based on a common (and studied) age-appropriate text that provides scaffolding for the context needed.

### **Year 2**

#### **Autumn: Construction – Rebuilding History:**

How can we build strong and stable houses like those from the time of the Great Fire of London?

Children in their history are being introduced to different views of events and will be challenged to rebuild London. Therefore, studying construction in the Autumn term allows children to learn about the Great Fire of London in two subjects side by side, adding for STEAM integration to our curriculum. This topic builds on modelling skills by designing historically inspired structures with improved strength and accuracy, incorporating a simple mechanism (hinge, lever with pivot, slider). Simple mechanism work has been conducted in Year 1.

### **Spring: Textiles – Buzzing Bookmarks:**

How can you make a bookmark that's both fun and useful?

This topic builds on basic joining by introducing simple stitches such as running stitch and cross stitch. Children learn that textiles can be both decorative and functional as they make bookmarks. Children will now progress from joining materials into sewing. It is important to note that as sewing is a new concept to many children, this topic is put into the context of bookmarks to allow children's use of prior knowledge in lessons.

### **Summer: Cooking and Nutrition – Super Veggies to the rescue**

How can we make veggies fun and delicious?

This topic builds on basic preparation by introducing baking and seasoning. Children follow a simple recipe and learn that different cooking methods impact healthiness and taste. Children in this topic are being introduced to simple criteria to evaluate their creations. This helps children to build on the design process skilled gained in KS1.

### **Year 3:**

#### **Autumn: Construction - Strengthening paper/cardboard structures-cake box-ribbing, lamination and corrugation**

Children will now build on their understanding of strengthening structures from Year 2. In Year 2 children were challenged with designing a strong structure. This topic extends this learning by providing strict criteria to the outcome, including the product being fit for purpose, strong to transport goods and aesthetically pleasing to go to market. This topic allows children to see the local impact of DT by using a case study of our local bakery, Soigne.

#### **Spring: Cooking and Nutrition - Design a chocolate bar including wrapper**

Cadburys are looking for new ideas for chocolate bars, can we give them ideas including packaging ideas?

Children in year 3 will now build upon their knowledge of food production from KS1. This extends knowledge of food preparation to the importance of organisations like fair trade and their impact on the world. It is also important to note that children study about food production and trade in Geography in Spring 2, providing STEAM integration in the curriculum and scaffolding.

### **Summer: Textiles – Stone Age Mysteries:**

How can you make the perfect pouch for a Stone Age adventure?

Children are studying a thematic topic in History in the Autumn term focusing on Pre History (Stone Age to the Iron Age). This allows studying Stone Age Mysteries to lean on their previous contextual understanding of uses for pouches in the Stone Age e.g. hunter gatherers. This topic extends sewing skills to joining fabric securely with seam stitches and adding fastenings. Children design and make a pouch, linking historical context to functional design. It is important to note that children are given an opportunity in quick succession from the summer of KSI to put their knowledge of sewing in textiles so that appropriate gaps in a new skill can be plugged.

### **Year 4:**

#### **Autumn: Textiles – Bag a story**

How can we create a functional and creative book bag?

This topic develops construction skills through making a sturdy fabric tote bag. Children practise backstitch and handle attachment and explore how designers influence choices in functionality and style. Children have previously studied running stitches and joining materials. This topic allows them to consolidate and progress on these skills. As sewing skills are relatively abstract for children, the topic has been framed within something familiar to them (making a book bag).

Year 4 do not study a 'food and nutrition' module due to the focus on healthy lifestyles and food choices in PSHE and Science throughout KSI and LKS2

#### **Spring: Construction – Greek Vases**

How did the Greeks make such elaborate vases?

Children in KSI and LKS2 have worked significantly on construction and worked in depth on their skills of making strong structure. This topic extends children's learning into a different context and medium to show children how design and construction can be used for a purpose. Children are studying the Ancient Greeks in this half term, allowing for STEAM integration across the curriculum and scaffolding for prior learning. It is also important to note that this construction module follows Summer in Year 3 to provide progress within this strand.

#### **Summer: Cooking and Nutrition – Root and shoot**

Children are developing their cooking and nutrition skills in the summer of Year 4. We build on year 3 by showing the versatility of different root vegetables. This builds on their previous understanding of Fair Trade and the Journey that food goes on through their learning in Geography.

### **Year 5:**

#### **Autumn: Construction – Fair Tale engineering**

How can we use pulleys and levers to solve a problem?

This topic expands functional design through the construction of a fairy tale-themed theatre backdrop or storybook incorporating mechanical systems like pulleys, levers and linkages along with previously taught mechanisms. Children's knowledge of structure, moving parts and electricity will allow them to apply their skills in a new context.

### **Spring: Textiles – Moonlit magic**

How can fabric and stitching create atmosphere?

This topic explores textiles as a medium for storytelling and atmosphere. Children combine appliqué, layered fabrics and decorative stitching to design and make a wall hanging with expressive impact. Children are now putting their sewing skills to the test in a more complicated theme. This topic builds on the basic stitches they have been taught in previous year groups. It is important to note that children study a range of texts supporting this topic and Earth and Space in Science.

### **Summer: Food and Nutrition – Central America on a plate**

How can we cook a dish that celebrates its cultural flavours?

This topic develops independence by preparing and cooking a multi-step dish (tortillas, salsa, guacamole). Children deepen their understanding of cultural influences on food and learn to adapt recipes. Children's study of food and nutrition throughout LKS2 and KS1 will allow them to build on cooking skills and teach them to design, adapt and change their recipes.

## **Year 6:**

### **Autumn: Construction – Creating Anderson Shelters**

How did people in WWII protect themselves?

This topic allows children to build on their knowledge of strengthening structures in historical context. Children in the Autumn Term study about WWII and the need for air raid shelters. With this historical context and scaffolding in mind, children can now bring all of their knowledge of structure stability to design an air raid shelter that is fit for purpose.

### **Spring: Construction – Electrifying creatures**

**How can we combine and design to create a spooky Gothic Themed model?**

This topic consolidates previous learning on mechanical and electrical systems by the construction of a strong, reinforced and aesthetically pleasing structure. It is important to note that Year 6 has two construction modules. This is due to the fact that children should be given an opportunity to make progress in strengthening structures and movement within the construction strand.

### **Summer 1: Textiles – Trash to Treasure**

How can you transform old materials into something new and amazing?

This topic encourages sustainability and innovation by upcycling old materials into new textile products. Children apply a range of stitching and embellishment techniques with independence and reflect on design for function, creativity and environmental responsibility. This topic is the culmination of all of the children's

skills within textiles and gets them to apply the range of stitching techniques they have studied. It is also important to note that in Autumn and Spring in Geography, children study about the economic activity of the UK and sustainable nature of the UK and our production methods/techniques. This provides contextual understanding to the topic, STEAM integration within the curriculum and an opportunity to apply their theoretical knowledge of sustainability to their DT learning opportunities.

### **Summer 2 – Food and Nutrition**

How can we mix recipes to invent an exciting new food?

This topic encourages creativity and independence by designing and cooking hybrid dishes. Children critically evaluate flavour, texture and presentation, applying advanced preparation and cooking techniques. This topic is the culmination of children's progress within food and nutrition. Children can take all of their contextual knowledge, knowledge of different food stuffs, where food is from and technical knowledge to create, adapt and change recipes.

### **Design and Technology Progression of Skills:**

At Whinstone, we have designed our curriculum around three strands (cooking and nutrition, textiles and constructions). These areas underpin all of our work that is completed in Design and Technology. Substantiative knowledge in these areas is revisited to allow for children to build long term connections between their learning in Design and Technology. Other areas of school such as History and Geography are also used to provide children with a scaffold on which to hang their learning and provide prior contextual understanding for their Design and Technology topics.

At Whinstone, we teach distinct Design and Technology disciplinary concepts. These are:

- Researching
- Designing
- Making
- Evaluating
- Technical Knowledge

These disciplinary concepts are explicitly taught throughout all Design and Technology topics and are progressive from EYFS to Year 6. Our series of lessons throughout the terms reflect the design process. All of our topics link to a designer, company or product that so that children can see the real world application of their DT learning.

<b>Researching</b>							
<b><u>Strand</u></b>	<b><u>EYFS</u></b>	<b><u>Year 1</u></b>	<b><u>Year 2</u></b>	<b><u>Year 3</u></b>	<b><u>Year 4</u></b>	<b><u>Year 5</u></b>	<b><u>Year 6</u></b>
Construction	I can talk about the lives of the people around me and explore what they do and use in their jobs (e.g., bakers, builders, designers)	I can explore toys and talk about what makes them fun and safe.	I can find out about historical houses and say how they could be improved.	I can explore the structures, ribbing, lamination and corrugation that exist in the market already for packaging.	I can explore and compare the uses and types of Greek Vases.	I can investigate how mechanisms can solve real-life problems and link this to a problem in the world of fairy tale.	I can describe the history of the air raid shelter and explain the reasons why they were necessary.  I can describe features of Gothic design using key vocabulary
Textiles	I can explore a range of materials and their uses.	I can explore different materials and their uses in designing a book.	I can explore different fabric products and learn how to thread a needle	I can explore and compare different pouches, discussing their features and sorting them into groups.	I can explore different bags and learn about a textile designer, explaining how their ideas inspire strong, useful and appealing designs.	I can explore and compare the work of different textile artists and talk about how fabric, colour and stitching create mood and atmosphere.	I can explore upcycled textile products and explain how they reduce waste.

Cooking and Nutrition	I can explore different fruits and vegetables and talk about which ones are healthy snacks.	I can explore different foods, what makes them healthy or unhealthy and begin to understand a balanced diet.	I can explore different types of potatoes and explain how they can be cooked in different ways.	I can research effective packaging designs and the ingredients we use to make chocolate.	I can explore the versatility of root vegetables and explore their flavours and ingredients.	I can explore ingredients and flavours from Central American cuisine and explain how they are used together.	I can explain what makes a hybrid food exciting and compare chef creations, describing how flavour, texture and presentation contribute to their success.
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## Designing

Strand	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Construction	I can choose and talk about what I want to make and what tools and materials I might use.	I can draw a simple plan for my toy and choose materials to use.	I can draw a plan for a Tudor model house with a simple moving part.	I can design a piece of packing for a cake that will be good for transport uses and also marketing purposes.	I can design a robust and historically accurate Greek vase.  I can design a functional Roman-themed model with a clear purpose and electrical element.	I can create a design criteria and draw a labelled plan to solve a problem using mechanisms.	I can design an air raid shelter using historically accurate language and test the appropriate materials.  I can create a labelled design showing Gothic design and electrical features
Textiles	I can begin to discuss the properties of different materials	I can orally say how I would like my book to be and draw a simple sketch	I can create a design plan for a bug-themed bookmark that is both functional and appealing.	I can design a pouch using a paper template and plan features such as size, shape and fastening.	I can design a book bag with chosen size, handles and decorations linked to a favourite story.	I can design my wall hanging and use a template to cut fabric shapes accurately.	I can plan a creative project that reuses materials with purpose.
Cooking and Nutrition	I can select ingredients to make a food product.	I can plan a snack using fruits or vegetables, choosing shapes, textures and colours I like.	I can plan potato wedges by choosing which flavours or seasonings to add.	I can create a design for a chocolate bar wrapper based on a strict criteria.		I can plan how to adapt a traditional recipe for flavour, texture or presentation.	I can design a hybrid dish that combines two techniques, planning ingredients, shape and decoration.

<b>Making</b>							
<b>Strand</b>	<b>EYFS</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
Construction	I can safely use tools like scissors, glue and construction toys to make something I imagined or planned	I can build my toy using my plan, choosing materials and adding moving parts.	I can build a model of a Tudor house using card and sticks with a simple mechanism.	I can create a cake box product that can be tested against multiple variables for strength and aesthetic appeal	I can make a Greek vase using clay using historically accurate patterns and processes.  I can build a Roman-themed model and integrate a simple working electrical circuit and mechanism.	I can construct a fairy tale-themed picture book or theatre backdrop that includes working mechanisms	I can make smaller than scale air raid shelter whilst using knowledge from the testing process.  I can assemble a stable structure and add electrical features.
Textiles	I can use a variety of materials to make product	I can prepare the materials I need for my book and make an initial model	I can sew two pieces of fabric together and add decorative stitching to create a functional bookmark.	I can sew fabric pieces together, add a fastening and make sure my pouch is strong and functional.	I can sew fabric pieces together neatly and securely to create my book bag.	I can sew on my appliqué shapes and use blanket stitch to finish edges	I can sew my cushion cover with accuracy, following the plan I designed, and ensure all pieces fit together well.
Cooking and Nutrition	With support, I can prepare and make fruit and vegetable snacks	I can prepare a fruit or vegetable snack safely, cutting and arranging pieces to make it appealing.	I can peel and cut vegetables safely; I can follow a recipe step by step to prepare and cook potato wedges safely.	I can join materials together and combine ingredients to make an edible chocolate bar.		I can follow a multi-step recipe to prepare tortillas and dips with control and accuracy	I can follow my recipe independently, making adjustments where needed to improve the outcome.

<b>Evaluating</b>							
<b>Strand</b>	<b>EYFS</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
Construction	I can talk about what I've made, explain how I did it and say how I might change or improve it.	I can test my toy to see how well it works and how to make it better another time.	I can test if my model is stable and say how to improve it	I can explain why my cake box product would be useful for transport, marketing and cost purposes.	I can test the product against a set criteria.  I can test the model's function and circuit reliability and suggest ways to improve.	I can evaluate my product against my criteria and suggest improvements.	I can reflect on the design, testing and amendments process.  I can evaluate my dish for taste, appearance and cultural inspiration, suggesting improvements with clear reasons
Textiles	I can talk about what I have created	I can describe what I like about my book and say how I could make it better	I can test and evaluate my bookmark for durability, usability and appearance.	I can test and evaluate my finished pouch, thinking about what worked well and what I could improve.	I can test my bag for strength and use, and explain how well it meets my design goals, suggesting improvements	I can evaluate my wall hanging, explain how it creates atmosphere and suggest improvements.	I can reflect on my upcycled cushion cover, thinking about design, function and sustainability, and suggest ways to improve future projects.
Cooking and Nutrition	I can talk about my snack and what I liked about it	I can taste my snack and say what I like about it and how I could make it even better.	I can taste my potato wedges, say what worked well, and suggest one way to improve them.	I can give reasons why my packaging would be appealing and how I might make my design and product better for personal use and the consumer.		I can evaluate the taste, appearance and authenticity of my dish and suggest improvements.	I can test the electrical circuits and evaluate the model, explaining how it could be improved further.

## Technical Knowledge

Strand	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Construction	I can explore how to use materials and tools in different ways, noticing how they feel and what they can do when I join, layer or build with them	I can practise cutting and joining materials safely.	I can measure and learn about cross bracing to strengthen and how hinges, levers, pivots and sliders work.	I can use different equipment and methods to join materials together.	I can use slip, water and clay techniques to make my vase.  I develop my knowledge of mechanisms - cams.	I can learn how pulleys, levers and linkages work building on my knowledge of cams.	I can use a range of joining, strengthening and building techniques.  I can explain how electrical circuits work.
Textiles	I can explore how to use materials and tools in different ways, noticing how they feel and what they can do when I join, layer or build with them	I can describe the materials I can go to use and describe one reason why they might be good materials to use.	I can practise running stitch and cross stitch to strengthen and decorate fabric.	I can practise stitches and fastenings for my pouch.	I can explain the purpose of different stitches and how I used tools safely	I can use running stitch and over stitch to attach appliqué shapes securely and neatly.	I can use a range of stitches and embellishments to add strength and detail.
Cooking and Nutrition	With support, I can learn how to prepare food safely by washing hands, using clean tools and cutting carefully.	I can explain how to prepare food safely by washing hands, using clean tools and cutting carefully.	I can follow a recipe safely, using tools correctly and explaining how to cook potatoes in a healthy way.	I can mix effectively.		I can describe how cultural and seasonal ingredients influence food choices.	I can explain why some flavour combinations work and apply preparation techniques carefully to improve flavour, texture and presentation

**DT Assessment Statements:**

**Year 1**

**Autumn: Textiles - Make a book with different materials**

<b><u>WTS</u></b>	<b><u>EXS</u></b>	<b><u>GDS</u></b>
<input type="checkbox"/> <b>Research:</b> Needs support to explore different fabric textures and identify simple features. <input type="checkbox"/> <b>Design:</b> Needs guidance to create a labelled plan for a page or material choice. <input type="checkbox"/> <b>Make:</b> Needs help cutting and joining fabrics accurately. <input type="checkbox"/> <b>Evaluate:</b> Can state likes/dislikes but struggles to explain improvements. <input type="checkbox"/> <b>Technical Knowledge:</b> Needs adult support to understand simple textile techniques (e.g., gluing, simple stitching).	<input type="checkbox"/> <b>Research:</b> Identifies textures and features of textile pages. <input type="checkbox"/> <b>Design:</b> Produces a simple labelled page design. <input type="checkbox"/> <b>Make:</b> Cuts and joins materials with support. <input type="checkbox"/> <b>Evaluate:</b> States likes/dislikes about their book page. <input type="checkbox"/> <b>Technical Knowledge:</b> Knows simple joining methods (glue, tape, basic stitching).	<input type="checkbox"/> <b>Research:</b> Compares textile pages independently. <input type="checkbox"/> <b>Design:</b> Produces clear designs with appropriate material choices. <input type="checkbox"/> <b>Make:</b> Works neatly and with rising accuracy. <input type="checkbox"/> <b>Evaluate:</b> Suggests realistic improvements. <input type="checkbox"/> <b>Technical Knowledge:</b> Chooses suitable joining methods and explains why.

**Spring: Construction – Toy Makers Workshop:**

<b><u>WTS</u></b>	<b><u>EXS</u></b>	<b><u>GDS</u></b>
<input type="checkbox"/> <b>Research:</b> Needs prompting to explore how toys move or are made. <input type="checkbox"/> <b>Design:</b> Needs support drawing a toy idea with labelled parts. <input type="checkbox"/> <b>Make:</b> struggles to cut, fold and join recycled materials securely without guidance. <input type="checkbox"/> <b>Evaluate:</b> Needs adult help comparing their toy to the design criteria. <input type="checkbox"/> <b>Technical Knowledge:</b> Requires support to understand simple mechanisms (wheels, sliders).	<input type="checkbox"/> <b>Research:</b> Describes simple features of toys. <input type="checkbox"/> <b>Design:</b> Draws a toy plan with basic labels. <input type="checkbox"/> <b>Make:</b> Uses recycled materials; needs support for secure joins. <input type="checkbox"/> <b>Evaluate:</b> Identifies one thing that works well. <input type="checkbox"/> <b>Technical Knowledge:</b> Understands simple mechanisms (wheels, sliders).	<ul style="list-style-type: none"> <li>• <b>Research:</b> Compares toy functions with growing independence.</li> <li>• <b>Design:</b> Designs with user needs in mind.</li> <li>• <b>Make:</b> Constructs toys with improved stability.</li> <li>• <b>Evaluate:</b> Makes thoughtful suggestions for improvement.</li> <li>• <b>Technical Knowledge:</b> Applies mechanisms accurately.</li> </ul>

**Summer: Cooking and Nutrition - Plant Power:**

<b><u>WTS</u></b>	<b><u>EXS</u></b>	<b><u>GDS</u></b>
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<input type="checkbox"/> <b>Research:</b> Needs guidance identifying healthy plant-based foods. <input type="checkbox"/> <b>Design:</b> Needs help deciding ingredients for a simple snack. <input type="checkbox"/> <b>Make:</b> Needs support following simple food-prep steps safely. <input type="checkbox"/> <b>Evaluate:</b> Can say whether they liked the snack but struggles to reflect on taste/appearance. <input type="checkbox"/> <b>Technical Knowledge:</b> Needs help understanding the basics of healthy eating.	<input type="checkbox"/> <b>Research:</b> Identifies healthy plant foods. <input type="checkbox"/> <b>Design:</b> Plans a simple healthy snack. <input type="checkbox"/> <b>Make:</b> Prepares ingredients safely. <input type="checkbox"/> <b>Evaluate:</b> Comments on taste and appearance. <input type="checkbox"/> <b>Technical Knowledge:</b> Understands the idea of eating healthily.	<input type="checkbox"/> <b>Research:</b> Explains why some foods are healthy. <input type="checkbox"/> <b>Design:</b> Creates balanced snack ideas. <input type="checkbox"/> <b>Make:</b> Prepares food safely and with independence. <input type="checkbox"/> <b>Evaluate:</b> Reflects on several aspects (taste, texture, look). <input type="checkbox"/> <b>Technical Knowledge:</b> Explains benefits of chosen ingredients.
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## Year 2

### Autumn: Construction – Rebuilding History:

<u>WTS</u>	<u>EXS</u>	<u>GDS</u>
<input type="checkbox"/> <b>Research:</b> Needs support to explore features of historical houses. <input type="checkbox"/> <b>Design:</b> Needs help planning a stable structure with clear parts. <input type="checkbox"/> <b>Make:</b> Needs guidance joining materials to stay upright and strong. <input type="checkbox"/> <b>Evaluate:</b> Needs support identifying what makes a structure more stable. <input type="checkbox"/> <b>Technical Knowledge:</b> Requires help understanding strengthening method	<input type="checkbox"/> <b>Research:</b> Identifies features of historic houses. <input type="checkbox"/> <b>Design:</b> Draws a plan with labelled parts. <input type="checkbox"/> <b>Make:</b> Builds a simple structure that stands. <input type="checkbox"/> <b>Evaluate:</b> Identifies strengths and weaknesses with prompting. <input type="checkbox"/> <b>Technical Knowledge:</b> Knows some ways to strengthen structures	<input type="checkbox"/> <b>Research:</b> Explains why certain features helped during the Great Fire. <input type="checkbox"/> <b>Design:</b> Designs with stability clearly in mind. <input type="checkbox"/> <b>Make:</b> Constructs stable and well-joined models. <input type="checkbox"/> <b>Evaluate:</b> Suggests improvements linked to stability. <input type="checkbox"/> <b>Technical Knowledge:</b> Explains strengthening strategies.

### Spring: Textiles – Buzzing Bookmarks:

<u>WTS</u>	<u>EXS</u>	<u>GDS</u>
<input type="checkbox"/> <b>Research:</b> Needs support examining textiles and simple decorative features. <input type="checkbox"/> <b>Design:</b> Needs help designing a bookmark that meets purpose and size.	<input type="checkbox"/> <b>Research:</b> Looks at textile examples noticing features. <input type="checkbox"/> <b>Design:</b> Produces a simple bookmark design. <input type="checkbox"/> <b>Make:</b> Cuts and joins fabric with adult support.	<input type="checkbox"/> <b>Research:</b> Compares usefulness of different textile materials. <input type="checkbox"/> <b>Design:</b> Produces accurate designs with decorative ideas. <input type="checkbox"/> <b>Make:</b> Uses neat stitching and accurate cutting.

<input type="checkbox"/> <b>Make:</b> Needs assistance cutting, shaping, and joining fabric neatly. <input type="checkbox"/> <b>Evaluate:</b> Needs prompting to compare the finished bookmark with their design. <input type="checkbox"/> <b>Technical Knowledge:</b> Requires support understanding simple sewing or joining techniques.	<input type="checkbox"/> <b>Evaluate:</b> Discusses basic strengths of the finished bookmark. <input type="checkbox"/> <b>Technical Knowledge:</b> Knows simple stitches/joins	<input type="checkbox"/> <b>Evaluate:</b> Links improvements to function. <input type="checkbox"/> <b>Technical Knowledge:</b> Describes why certain stitches are stronger
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### Summer: Cooking and Nutrition – Super Veggies to the rescue

<u>WTS</u>	<u>EXS</u>	<u>GDS</u>
<input type="checkbox"/> <b>Research:</b> Needs support investigating different vegetables and flavours. <input type="checkbox"/> <b>Design:</b> Requires help planning a balanced vegetable snack. <input type="checkbox"/> <b>Make:</b> Needs guidance using tools safely when preparing ingredients. <input type="checkbox"/> <b>Evaluate:</b> Needs support identifying what worked well and what didn't. <input type="checkbox"/> <b>Technical Knowledge:</b> Needs help understanding how ingredients change when prepared.	<input type="checkbox"/> <b>Research:</b> Identifies vegetables and their basic properties. <input type="checkbox"/> <b>Design:</b> Plans a simple vegetable-based dish. <input type="checkbox"/> <b>Make:</b> Works safely when chopping and preparing. <input type="checkbox"/> <b>Evaluate:</b> Comments on what worked well. <input type="checkbox"/> <b>Technical Knowledge:</b> Understands that food changes when cooked/prepared.	<input type="checkbox"/> <b>Research:</b> Compares flavours and textures. <input type="checkbox"/> <b>Design:</b> Creates more thoughtful ingredient combinations. <input type="checkbox"/> <b>Make:</b> Shows accuracy in cutting and assembling. <input type="checkbox"/> <b>Evaluate:</b> Suggests improvements based on flavour and presentation. <input type="checkbox"/> <b>Technical Knowledge:</b> Explains why changes happen (softening, mixing).

### Year 3

#### Autumn: Construction - Strengthening paper/cardboard structures-cake box-ribbing, lamination and corrugation

<u>WTS</u>	<u>EXS</u>	<u>GDS</u>
<input type="checkbox"/> <b>Research:</b> Needs support to examine real packaging and identify weak/strong points. <input type="checkbox"/> <b>Design:</b> Needs guidance planning a box with accurate measurements. <input type="checkbox"/> <b>Make:</b> Needs help using strengthening techniques effectively.	<input type="checkbox"/> <b>Research:</b> Identifies weak/strong points in packaging. <input type="checkbox"/> <b>Design:</b> Produces a measured box plan with support. <input type="checkbox"/> <b>Make:</b> Uses strengthening techniques (ribbing, corrugation). <input type="checkbox"/> <b>Evaluate:</b> Tests and comments on strength.	<input type="checkbox"/> <b>Research:</b> Explains why certain structures fail/succeed. <input type="checkbox"/> <b>Design:</b> Plans with accurate measurements. <input type="checkbox"/> <b>Make:</b> Creates strong, neat, reliable structures. <input type="checkbox"/> <b>Evaluate:</b> Suggests improvements linked to structure.

<input type="checkbox"/> <b>Evaluate:</b> Needs prompting to test and compare their product against criteria. <input type="checkbox"/> <b>Technical Knowledge:</b> Requires support understanding ribbing, corrugation and lamination.	<input type="checkbox"/> <b>Technical Knowledge:</b> Knows different reinforcement methods	<input type="checkbox"/> <b>Technical Knowledge:</b> Can compare effectiveness of strengthening techniques.
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**Spring: Cooking and Nutrition - Design a chocolate bar including wrapper**

<b>WTS</b>	<b>EXS</b>	<b>GDS</b>
<input type="checkbox"/> <b>Research:</b> Needs support understanding fair trade and comparing chocolate products. <input type="checkbox"/> <b>Design:</b> Needs help planning a treat that considers sustainability. <input type="checkbox"/> <b>Make:</b> Needs support following recipes with accuracy. <input type="checkbox"/> <b>Evaluate:</b> Needs guidance evaluating flavour, texture and purpose. <input type="checkbox"/> <b>Technical Knowledge:</b> Requires support understanding melting, setting and ingredient origins.	<input type="checkbox"/> <b>Research:</b> Identifies what fair trade means. <input type="checkbox"/> <b>Design:</b> Plans a simple chocolate treat. <input type="checkbox"/> <b>Make:</b> Follows simple steps to prepare/mix ingredients. <input type="checkbox"/> <b>Evaluate:</b> Comments on taste and presentation. <input type="checkbox"/> <b>Technical Knowledge:</b> Knows chocolate melts and sets.	<input type="checkbox"/> <b>Research:</b> Explains the importance of fair trade choices. <input type="checkbox"/> <b>Design:</b> Considers sustainability in design. <input type="checkbox"/> <b>Make:</b> Works accurately with measurements and timings. <input type="checkbox"/> <b>Evaluate:</b> Reflects on multiple aspects and outcomes. <input type="checkbox"/> <b>Technical Knowledge:</b> Explains melting/setting processes.

**Summer: Textiles – Stone Age Mysteries:**

<b>WTS</b>	<b>EXS</b>	<b>GDS</b>
<input type="checkbox"/> <b>Research:</b> Needs support investigating Stone Age containers and materials. <input type="checkbox"/> <b>Design:</b> Needs guidance drawing and labelling a functional pouch. <input type="checkbox"/> <b>Make:</b> Needs help cutting and sewing fabric accurately. <input type="checkbox"/> <b>Evaluate:</b> Needs prompting to consider durability and usefulness. <input type="checkbox"/> <b>Technical Knowledge:</b> Requires support to understand types of stitches and fastenings.	<input type="checkbox"/> <b>Research:</b> Identifies features of Stone Age storage. <input type="checkbox"/> <b>Design:</b> Draws a labelled pouch design. <input type="checkbox"/> <b>Make:</b> Cuts and stitches fabric with support. <input type="checkbox"/> <b>Evaluate:</b> Comments on usefulness and durability. <input type="checkbox"/> <b>Technical Knowledge:</b> Knows basic stitches and fastenings.	<input type="checkbox"/> <b>Research:</b> Explains Stone Age needs and relates them to design. <input type="checkbox"/> <b>Design:</b> Includes accurate measurements and thoughtful choices. <input type="checkbox"/> <b>Make:</b> Works with neat, strong stitching. <input type="checkbox"/> <b>Evaluate:</b> Suggests improvements based on user needs. <input type="checkbox"/> <b>Technical Knowledge:</b> Explains fastenings and stitch strength.

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**Year 4**

**Autumn: Textiles – Bag a story**

<b>WTS</b>	<b>EXS</b>	<b>GDS</b>
<input type="checkbox"/> <b>Research:</b> Needs support evaluating examples of bags and their functions. <input type="checkbox"/> <b>Design:</b> Needs guidance to create a scale-accurate plan with key features. <input type="checkbox"/> <b>Make:</b> Needs assistance sewing accurately and assembling parts. <input type="checkbox"/> <b>Evaluate:</b> Needs help considering how well the product meets the user’s needs. <input type="checkbox"/> <b>Technical Knowledge:</b> Requires support understanding hems, seams, and reinforcement.	<input type="checkbox"/> <b>Research:</b> Identifies features of bags and their functions. <input type="checkbox"/> <b>Design:</b> Produces a plan with measurements. <input type="checkbox"/> <b>Make:</b> Uses accurate stitching and assembly with support. <input type="checkbox"/> <b>Evaluate:</b> Discusses how well it meets the purpose. <input type="checkbox"/> <b>Technical Knowledge:</b> Understands hems, seams and reinforcement.	<input type="checkbox"/> <b>Research:</b> Compares bag designs with detailed reasoning. <input type="checkbox"/> <b>Design:</b> Produces precise, well-scaled plans. <input type="checkbox"/> <b>Make:</b> Works with independence and neat finishes. <input type="checkbox"/> <b>Evaluate:</b> Reflects deeply on function and aesthetic. <input type="checkbox"/> <b>Technical Knowledge:</b> Explains reinforcement choices.

**Spring: Construction – Greek Vases**

<b>WTS</b>	<b>EXS</b>	<b>GDS</b>
<input type="checkbox"/> <b>Research:</b> Needs support exploring Greek vase styles and patterns. <input type="checkbox"/> <b>Design:</b> Needs help sketching a detailed vase plan. <input type="checkbox"/> <b>Make:</b> Needs guidance constructing a stable, smooth 3D form. <input type="checkbox"/> <b>Evaluate:</b> Needs support comparing their vase with historical examples. <input type="checkbox"/> <b>Technical Knowledge:</b> Requires help understanding clay-forming or card construction methods.	<input type="checkbox"/> <b>Research:</b> Identifies features of Greek vases. <input type="checkbox"/> <b>Design:</b> Produces a decorative plan. <input type="checkbox"/> <b>Make:</b> Forms a stable vase structure with support. <input type="checkbox"/> <b>Evaluate:</b> Compares product with Greek examples. <input type="checkbox"/> <b>Technical Knowledge:</b> Knows methods for forming shapes.	<input type="checkbox"/> <b>Research:</b> Explains purpose and style of Greek vases. <input type="checkbox"/> <b>Design:</b> Includes accurate patterns and shaping ideas. <input type="checkbox"/> <b>Make:</b> Produces a smooth, strong, well-finished structure. <input type="checkbox"/> <b>Evaluate:</b> Suggests improvements linked to historical accuracy. <input type="checkbox"/> <b>Technical Knowledge:</b> Explains form and technique choices.

**Summer: Cooking and Nutrition – Root and shoot**

<b>WTS</b>	<b>EXS</b>	<b>GDS</b>
<input type="checkbox"/> <b>Research:</b> Needs support identifying root vegetables and seasonal produce. <input type="checkbox"/> <b>Design:</b> Needs guidance planning a simple summer dish. <input type="checkbox"/> <b>Make:</b> Needs assistance peeling, slicing and combining safely. <input type="checkbox"/> <b>Evaluate:</b> Needs help describing flavour, texture and presentation. <input type="checkbox"/> <b>Technical Knowledge:</b> Requires support understanding cooking changes.	<input type="checkbox"/> <b>Research:</b> Identifies root vegetables and describes taste/texture. <input type="checkbox"/> <b>Design:</b> Plans a simple seasonal dish. <input type="checkbox"/> <b>Make:</b> Prepares food safely. <input type="checkbox"/> <b>Evaluate:</b> Discusses appearance and taste. <input type="checkbox"/> <b>Technical Knowledge:</b> Knows how ingredients change when heated.	<input type="checkbox"/> <b>Research:</b> Selects ingredients based on flavour combinations. <input type="checkbox"/> <b>Design:</b> Creates thoughtful and balanced dishes. <input type="checkbox"/> <b>Make:</b> Works with accuracy in preparation and cooking. <input type="checkbox"/> <b>Evaluate:</b> Suggests detailed improvements. <input type="checkbox"/> <b>Technical Knowledge:</b> Explains cooking effects clearly.

## **Year 5**

### **Autumn: Construction – Fair Tale engineering**

<b>WTS</b>	<b>EXS</b>	<b>GDS</b>
<input type="checkbox"/> <b>Research:</b> Needs support exploring how pulleys/levers work in real structures. <input type="checkbox"/> <b>Design:</b> Needs help creating a detailed annotated diagram showing mechanisms. <input type="checkbox"/> <b>Make:</b> Needs guidance assembling mechanisms accurately. <input type="checkbox"/> <b>Evaluate:</b> Needs support testing how well the mechanism solves the problem. <input type="checkbox"/> <b>Technical Knowledge:</b> Requires help understanding forces and motion basics.	<input type="checkbox"/> <b>Research:</b> Identifies how pulleys and levers work. <input type="checkbox"/> <b>Design:</b> Draws a mechanism design with labelled parts. <input type="checkbox"/> <b>Make:</b> Assembles mechanisms with some precision. <input type="checkbox"/> <b>Evaluate:</b> Tests product function and comments. <input type="checkbox"/> <b>Technical Knowledge:</b> Understands basic forces and motion.	<input type="checkbox"/> <b>Research:</b> Compares mechanisms and explains efficiency. <input type="checkbox"/> <b>Design:</b> Creates innovative mechanism designs. <input type="checkbox"/> <b>Make:</b> Works precisely and solves problems independently. <input type="checkbox"/> <b>Evaluate:</b> Gives detailed functional evaluations. <input type="checkbox"/> <b>Technical Knowledge:</b> Explains mechanical principles confidently.

### **Spring: Textiles – Moonlit magic**

<b>WTS</b>	<b>EXS</b>	<b>GDS</b>
<input type="checkbox"/> <b>Research:</b> Needs help exploring fabric textures and artistic textile examples.	<input type="checkbox"/> <b>Research:</b> Identifies how textiles can create atmosphere.	<input type="checkbox"/> <b>Research:</b> Analyses artistic textile examples. <input type="checkbox"/> <b>Design:</b> Produces ambitious, expressive designs.

<input type="checkbox"/> <b>Design:</b> Needs support planning an atmospheric textile piece with clear stitching choices. <input type="checkbox"/> <b>Make:</b> Needs assistance sewing creatively and securely. <input type="checkbox"/> <b>Evaluate:</b> Needs guidance explaining how effectively the design creates atmosphere. <input type="checkbox"/> <b>Technical Knowledge:</b> Requires support understanding embroidery and decorative techniques.	<input type="checkbox"/> <b>Design:</b> Produces a plan showing stitches and decoration. <input type="checkbox"/> <b>Make:</b> Uses stitching techniques with support. <input type="checkbox"/> <b>Evaluate:</b> Discusses how well the mood was created. <input type="checkbox"/> <b>Technical Knowledge:</b> Knows decorative stitches.	<input type="checkbox"/> <b>Make:</b> Works with precision and creativity. <input type="checkbox"/> <b>Evaluate:</b> Reflects deeply on artistic choices. <input type="checkbox"/> <b>Technical Knowledge:</b> Explains advanced decorative methods.
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**Summer: Food and Nutrition – Central America on a plate**

<b>WTS</b>	<b>EXS</b>	<b>GDS</b>
<input type="checkbox"/> <b>Research:</b> Needs support researching cultural food traditions. <input type="checkbox"/> <b>Design:</b> Needs guidance planning a dish using appropriate flavour combinations. <input type="checkbox"/> <b>Make:</b> Needs assistance cooking with accuracy and safety. <input type="checkbox"/> <b>Evaluate:</b> Needs prompting to reflect on cultural influence and flavour balance. <input type="checkbox"/> <b>Technical Knowledge:</b> Requires help understanding herbs, spices, and cooking processes.	<input type="checkbox"/> <b>Research:</b> Describes cultural food features. <input type="checkbox"/> <b>Design:</b> Plans a dish using appropriate ingredients. <input type="checkbox"/> <b>Make:</b> Cooks safely and follows steps. <input type="checkbox"/> <b>Evaluate:</b> Comments on cultural influence. <input type="checkbox"/> <b>Technical Knowledge:</b> Knows basic use of herbs/spices.	<input type="checkbox"/> <b>Research:</b> Analyses cultural influences in depth. <input type="checkbox"/> <b>Design:</b> Produces thoughtful and authentic combinations. <input type="checkbox"/> <b>Make:</b> Works with precision and timing. <input type="checkbox"/> <b>Evaluate:</b> Gives detailed flavour and cultural evaluations. <input type="checkbox"/> <b>Technical Knowledge:</b> Explains flavour and cooking processes.

**Year 6**

**Autumn: Construction – Creating Anderson Shelters**

<b>WTS</b>	<b>EXS</b>	<b>GDS</b>
<input type="checkbox"/> <b>Research:</b> Needs support understanding how shelters were used and built. <input type="checkbox"/> <b>Design:</b> Needs guidance drawing accurate plans showing structure.	<input type="checkbox"/> <b>Research:</b> Describes key features and purposes. <input type="checkbox"/> <b>Design:</b> Produces detailed plans. <input type="checkbox"/> <b>Make:</b> Creates stable structures with support.	<input type="checkbox"/> <b>Research:</b> Explains the effectiveness of designs historically. <input type="checkbox"/> <b>Design:</b> Produces accurate, thoughtful engineering plans.

<input type="checkbox"/> <b>Make:</b> Needs help creating strong frames and joining materials securely. <input type="checkbox"/> <b>Evaluate:</b> Needs support testing strength and stability. <input type="checkbox"/> <b>Technical Knowledge:</b> Requires help understanding reinforcement and material properties.	<input type="checkbox"/> <b>Evaluate:</b> Tests and comments on strength. <input type="checkbox"/> <b>Technical Knowledge:</b> Understands reinforcement methods.	<input type="checkbox"/> <b>Make:</b> Builds highly stable and accurate structures. <input type="checkbox"/> <b>Evaluate:</b> Gives deep reasoning about weaknesses. <input type="checkbox"/> <b>Technical Knowledge:</b> Explains structural engineering clearly.
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**Spring: Construction – Electrifying creatures**

**How can we combine and design to create a spooky Gothic Themed model?**

<b>WTS</b>	<b>EXS</b>	<b>GDS</b>
<input type="checkbox"/> <b>Research:</b> Needs support investigating simple circuits and Gothic architectural features. <input type="checkbox"/> <b>Design:</b> Needs help planning a model combining circuits and structure. <input type="checkbox"/> <b>Make:</b> Needs guidance wiring circuits safely and assembling components. <input type="checkbox"/> <b>Evaluate:</b> Needs prompting to test and troubleshoot electrical function. <input type="checkbox"/> <b>Technical Knowledge:</b> Requires support understanding electrical components and connections.	<input type="checkbox"/> <b>Research:</b> Identifies features of simple circuits. <input type="checkbox"/> <b>Design:</b> Plans a product combining structure and electronics. <input type="checkbox"/> <b>Make:</b> Constructs circuits safely with support. <input type="checkbox"/> <b>Evaluate:</b> Tests and identifies issues. <input type="checkbox"/> <b>Technical Knowledge:</b> Knows key electrical components.	<input type="checkbox"/> <b>Research:</b> Explains electrical functions confidently. <input type="checkbox"/> <b>Design:</b> Integrates circuits creatively and accurately. <input type="checkbox"/> <b>Make:</b> Builds reliable circuits and structures independently. <input type="checkbox"/> <b>Evaluate:</b> Diagnoses faults thoughtfully. <input type="checkbox"/> <b>Technical Knowledge:</b> Understands electrical flow and component purpose

**Summer I: Textiles – Trash to Treasure**

<b>WTS</b>	<b>EXS</b>	<b>GDS</b>
<input type="checkbox"/> <b>Research:</b> Needs support exploring upcycled examples and materials. <input type="checkbox"/> <b>Design:</b> Needs guidance planning how to repurpose materials effectively.	<input type="checkbox"/> <b>Research:</b> Identifies ways materials can be reused. <input type="checkbox"/> <b>Design:</b> Plans how to repurpose items. <input type="checkbox"/> <b>Make:</b> Joins unconventional materials.	<input type="checkbox"/> <b>Research:</b> Evaluates upcycled products in detail. <input type="checkbox"/> <b>Design:</b> Produces innovative and environmentally-aware plans.

<input type="checkbox"/> <b>Make:</b> Needs help manipulating and joining unconventional materials. <input type="checkbox"/> <b>Evaluate:</b> Needs support judging durability and creativity. <input type="checkbox"/> <b>Technical Knowledge:</b> Requires help understanding sustainability and material properties	<input type="checkbox"/> <b>Evaluate:</b> Comments on creativity and durability. <input type="checkbox"/> <b>Technical Knowledge:</b> Knows basic sustainability concepts.	<input type="checkbox"/> <b>Make:</b> Works creatively and accurately with unconventional materials. <input type="checkbox"/> <b>Evaluate:</b> Gives detailed feedback on function and sustainability. <input type="checkbox"/> <b>Technical Knowledge:</b> Explains environmental impacts.
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### Summer 2 – Food and Nutrition

<b>WTS</b>	<b>EXS</b>	<b>GDS</b>
<input type="checkbox"/> <b>Research:</b> Needs support investigating ingredient combinations. <input type="checkbox"/> <b>Design:</b> Needs help creating an original recipe with clear steps. <input type="checkbox"/> <b>Make:</b> Needs guidance following and adapting their recipe safely. <input type="checkbox"/> <b>Evaluate:</b> Needs prompting to judge the success of the new dish. <input type="checkbox"/> <b>Technical Knowledge:</b> Requires help understanding how ingredients behave when combined.	<input type="checkbox"/> <b>Research:</b> Identifies suitable ingredient combinations. <input type="checkbox"/> <b>Design:</b> Creates a simple original recipe. <input type="checkbox"/> <b>Make:</b> Follows and adapts recipe. <input type="checkbox"/> <b>Evaluate:</b> Reflects on taste and appearance. <input type="checkbox"/> <b>Technical Knowledge:</b> Knows basic food behaviours.	<input type="checkbox"/> <b>Research:</b> Analyses properties of ingredients confidently. <input type="checkbox"/> <b>Design:</b> Designs ambitious, creative, well-balanced recipes. <input type="checkbox"/> <b>Make:</b> Works independently and accurately. <input type="checkbox"/> <b>Evaluate:</b> Gives detailed, constructive evaluations. <input type="checkbox"/> <b>Technical Knowledge:</b> Explains the science behind the recipe outcome.

## Vocabulary Progression in Design and Technology:

### Textiles

### Construction

### Food and Nutrition

<u>Year Group:</u>	<u>Autumn:</u>	<u>Spring:</u>	<u>Summer:</u>
EYFS	<input type="checkbox"/> cut, stick, join <input type="checkbox"/> fold, bend, twist <input type="checkbox"/> smooth, rough, soft, hard <input type="checkbox"/> materials, tools, shapes <input type="checkbox"/> build, make, design, create <input type="checkbox"/> try, test, change, improve <input type="checkbox"/> safe, careful, strong		
Year 1	<input type="checkbox"/> fabric, textile, texture <input type="checkbox"/> thread, needle (plastic), stitch <input type="checkbox"/> join, fasten, glue <input type="checkbox"/> template, cover, page <input type="checkbox"/> soft, bumpy, fluffy, rough	<input type="checkbox"/> material, recycle, safe, strong <input type="checkbox"/> cut, slot, attach, assemble <input type="checkbox"/> wheel, axle, body <input type="checkbox"/> test, evaluate	<input type="checkbox"/> fruit, vegetable, plant <input type="checkbox"/> slice, chop, wash, mix <input type="checkbox"/> healthy, fresh, natural <input type="checkbox"/> smell, taste, crunchy, sweet
Year 2	<input type="checkbox"/> structure, stability, strong, weak <input type="checkbox"/> join, reinforce, base <input type="checkbox"/> flammable, waterproof <input type="checkbox"/> design criteria	<input type="checkbox"/> fabric, felt, pattern <input type="checkbox"/> running stitch, needle, thread <input type="checkbox"/> decoration, embellishment <input type="checkbox"/> purpose, function	<input type="checkbox"/> peel, grate, mash <input type="checkbox"/> nutrition, energy, vitamins <input type="checkbox"/> balanced diet <input type="checkbox"/> recipe, ingredient, method
Year 3	<input type="checkbox"/> ribbing, corrugation, lamination <input type="checkbox"/> structure, support, reinforcement <input type="checkbox"/> prototype, accuracy <input type="checkbox"/> stable, durable	<input type="checkbox"/> fair trade, ethical, sustainable <input type="checkbox"/> melt, combine, set <input type="checkbox"/> temperature, hygiene <input type="checkbox"/> origin, cocoa bean	<input type="checkbox"/> seam, hem, stitch types <input type="checkbox"/> durable, functional, fastening <input type="checkbox"/> template, pattern piece <input type="checkbox"/> weave, leather/skin (historical context)
Year 4	<input type="checkbox"/> seam allowance, applique	<input type="checkbox"/> form, shape, mould, carve	<input type="checkbox"/> boil, roast, steam

	<input type="checkbox"/> hemming, lining, fastening (button, zip, Velcro) <input type="checkbox"/> accuracy, precision <input type="checkbox"/> strength, durability	<input type="checkbox"/> slip, score, join (clay vocabulary) <input type="checkbox"/> decorative, functional <input type="checkbox"/> motif, pattern, symmetry	<input type="checkbox"/> seasonal, local, fresh produce <input type="checkbox"/> food groups, nutrients <input type="checkbox"/> sensory vocabulary (earthy, crisp, sweet, savoury)
Year 5	<input type="checkbox"/> mechanism, lever, pivot, fulcrum <input type="checkbox"/> pulley, axle, frame <input type="checkbox"/> force, motion, load <input type="checkbox"/> prototype, refine	<input type="checkbox"/> texture, tone, composition <input type="checkbox"/> embroidery, decorative stitch <input type="checkbox"/> overlay, layering, embellishment <input type="checkbox"/> aesthetic, atmosphere	<input type="checkbox"/> culture, cuisine, flavour profile <input type="checkbox"/> spices, herbs, marinade <input type="checkbox"/> fry, sauté, simmer <input type="checkbox"/> balanced meal, food origins
Year 6	<input type="checkbox"/> structure, reinforcement, bracing <input type="checkbox"/> corrugated metal, blast protection <input type="checkbox"/> air raid, design purpose <input type="checkbox"/> stability, durability	<input type="checkbox"/> circuit, component, switch <input type="checkbox"/> series, conductor, insulator <input type="checkbox"/> housing, mount, enclosure <input type="checkbox"/> design specification	<input type="checkbox"/> repurpose, upcycle, sustainability <input type="checkbox"/> patchwork, applique, repair <input type="checkbox"/> fibre, woven, non-woven <input type="checkbox"/> ecological impact <input type="checkbox"/> fusion, experiment, innovate <input type="checkbox"/> adapt, combine, evaluate <input type="checkbox"/> texture profile, flavour balance <input type="checkbox"/> recipe development

**Addressing misconceptions in Design and Technology:**

<u>Year Group:</u>	<u>Autumn:</u>	<u>Spring:</u>	<u>Summer:</u>
EYFS	<input type="checkbox"/> Thinking tools only have one correct use (e.g., scissors only cut straight lines). <input type="checkbox"/> Believing all materials behave the same when cut or joined. <input type="checkbox"/> Assuming things will stay together without needing to join them securely.	<input type="checkbox"/> Believing stronger pressure always means more accuracy when using tools. <input type="checkbox"/> Thinking natural materials can't break or tear. <input type="checkbox"/> Assuming structures will stand without support.	<input type="checkbox"/> Assuming their creation works the same way for everyone. <input type="checkbox"/> Believing they must copy an adult design exactly. <input type="checkbox"/> Thinking a design should remain the same and shouldn't be altered after testing.

	<input type="checkbox"/> Thinking designs don't need to match a purpose — "just making anything is fine."	<input type="checkbox"/> Believing that once something is built, it cannot be changed or improved.	
Year 1	<input type="checkbox"/> Believing all fabrics feel the same and can be used interchangeably. <input type="checkbox"/> Thinking glue works as well as stitching for all textile joins. <input type="checkbox"/> Assuming neat stitching is not important for the final product. <input type="checkbox"/> Believing templates don't need to be followed accurately.	<input type="checkbox"/> Assuming any recycled material is strong enough for toy construction. <input type="checkbox"/> Thinking wheels will turn even if the axle is fixed incorrectly. <input type="checkbox"/> Believing decorations are more important than safety or stability. <input type="checkbox"/> Thinking toys do not need to be tested because they "look fine."	<input type="checkbox"/> Believing all plant-based foods are automatically healthy, regardless of preparation. <input type="checkbox"/> Thinking fruit and vegetables don't need washing. <input type="checkbox"/> Assuming chopping techniques don't matter for safety. <input type="checkbox"/> Thinking food can be mixed in any order without affecting the result.
Year 2	<input type="checkbox"/> Assuming tall structures are automatically stronger. <input type="checkbox"/> Believing the Great Fire of London happened because houses were "badly built," not because of close spacing and flammable materials. <input type="checkbox"/> Thinking a base isn't important for stability. <input type="checkbox"/> Assuming all materials burn in the same way.	<input type="checkbox"/> Believing felt won't fray so it cannot tear. <input type="checkbox"/> Thinking large stitches make a piece stronger. <input type="checkbox"/> Assuming decorative features don't impact usability. <input type="checkbox"/> Believing patterns don't require planning or marking out.	<input type="checkbox"/> Thinking vegetables must always be cooked to be edible. <input type="checkbox"/> Assuming healthy foods don't need portion control. <input type="checkbox"/> Thinking peeling and grating are interchangeable techniques. <input type="checkbox"/> Believing recipes cannot be adapted for taste or texture.
Year 3	<input type="checkbox"/> Thinking thicker cardboard is always stronger than thin but reinforced card. <input type="checkbox"/> Believing corrugation or ribbing is decorative, not functional.	<input type="checkbox"/> Believing "fair trade" means chocolate tastes different, not that it relates to ethics.	<input type="checkbox"/> Thinking a pouch only needs one layer of material to be strong. <input type="checkbox"/> Assuming fastenings are optional because the pouch "holds itself closed."

	<input type="checkbox"/> Assuming a lid isn't necessary for protection. <input type="checkbox"/> Thinking accuracy in folding doesn't affect strength.	<input type="checkbox"/> Thinking all chocolate melts at the same temperature. <input type="checkbox"/> Assuming hygiene isn't important because chocolate will be heated. <input type="checkbox"/> Believing sustainable choices don't impact design decisions.	<input type="checkbox"/> Believing patterns and templates aren't necessary. <input type="checkbox"/> Thinking historical pouches were decorative rather than functional.
Year 4	<input type="checkbox"/> Assuming a bag is strong because the fabric feels thick. <input type="checkbox"/> Believing lining is only for decoration. <input type="checkbox"/> Thinking seams don't need seam allowance to stay strong. <input type="checkbox"/> Assuming symmetrical designs don't require measuring.	<input type="checkbox"/> Thinking ancient vases were made in one piece. <input type="checkbox"/> Believing clay dries instantly or won't crack. <input type="checkbox"/> Assuming decoration doesn't reflect Greek stories or beliefs. <input type="checkbox"/> Thinking shape doesn't affect function (e.g., storage, pouring).	<input type="checkbox"/> Believing all root vegetables taste the same. <input type="checkbox"/> Thinking "healthy" means low in calories only. <input type="checkbox"/> Assuming boiling is the only way to cook vegetables. <input type="checkbox"/> Thinking nutrition doesn't change depending on how food is cooked.
Year 5	<input type="checkbox"/> Believing a longer lever is always better. <input type="checkbox"/> Thinking pulleys and levers work automatically without secure fixing. <input type="checkbox"/> Assuming direction of movement doesn't change with mechanism placement. <input type="checkbox"/> Believing decoration doesn't interfere with mechanical movement.	<input type="checkbox"/> Thinking "atmosphere" refers only to colour, not texture or material. <input type="checkbox"/> Assuming any stitch can be used for any purpose. <input type="checkbox"/> Believing layered fabric always increases strength, not just aesthetics. <input type="checkbox"/> Thinking textiles cannot express mood or story.	<input type="checkbox"/> Believing all spicy foods come from the same culture. <input type="checkbox"/> Thinking spices are only for "making things hot." <input type="checkbox"/> Assuming cultural dishes cannot be adapted. <input type="checkbox"/> Believing frying is automatically unhealthy regardless of food type.

<p>Year 6</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Thinking shelter strength comes from thickness, not shape (corrugation).</li> <li><input type="checkbox"/> Assuming WWII shelters were underground bunkers everywhere.</li> <li><input type="checkbox"/> Believing materials were chosen only because they were cheap.</li> <li><input type="checkbox"/> Thinking the design wasn't tested or refined historically.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Believing electricity flows only if wires "look connected."</li> <li><input type="checkbox"/> Thinking all materials conduct electricity.</li> <li><input type="checkbox"/> Assuming adding more components always makes a model better.</li> <li><input type="checkbox"/> Believing bulbs will light no matter where they are placed in a circuit.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Thinking recycled materials are always weak.</li> <li><input type="checkbox"/> Believing upcycling is just decoration, not functional improvement.</li> <li><input type="checkbox"/> Assuming materials cannot be repaired or repurposed.</li> <li><input type="checkbox"/> Thinking sustainability is only about reducing rubbish.</li> <li><input type="checkbox"/> Believing combining any foods creates a "fusion dish."</li> <li><input type="checkbox"/> Thinking recipes can be altered without changing cooking time or method.</li> <li><input type="checkbox"/> Assuming texture doesn't affect taste.</li> <li><input type="checkbox"/> Believing evaluation is only about taste, not appearance or nutrition.</li> </ul>
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