

# Design and Technology curriculum 2025

Design and Technology encourages our children at Lindfield Primary Academy to be both creative and innovative. They develop skills and knowledge in design, structures, mechanisms, and food and are actively encouraged to think about issues such as sustainability and enterprise. Children love making their own design decisions, being practical and creating real products that they can use or even taste. Design and Technology provides a motivational context for learning in Mathematics, English, Science and Art. As a school we provide children with a creative curriculum, planning exciting design challenges and projects relating to the topics on our curriculum map.

## Intent

**With these aspirations, our INTENT for the DT curriculum is:**

For children to develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.

For children to build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products.

For children to design and make high-quality prototypes and products for a wide range of users.

For children to critique, evaluate and test their ideas and products and the work of others.

For children to understand and apply the principles of nutrition and learn how to cook.

## Implementation

### Planning

The Design and Technology curriculum is split into 5 different areas; Designing, Making, Evaluating, Technical Knowledge and Cooking and Nutrition. Children love making their own design decisions, being practical and creating real products that they can use or even taste. Design and Technology provides a motivational context for learning in Mathematics, English, Science and Art. As a school we provide children with a creative curriculum, planning exciting design challenges and projects relating to the topics on our curriculum map. The curriculum enables all children to be introduced to a range of influential inventors, designers, engineers, and chefs from a range of backgrounds and cultures both modern and historical. From year to year, unit to unit, lesson to lesson, the curriculum supports children in making connections and building upon prior substantive and disciplinary knowledge.

### Recording

We record Design and Technology learning in a variety of ways. Designs, Step by step plans, lists of equipment and materials needed and evaluations will be recorded on paper and presented in individual learning journals, alongside photographs of practical activities.

### Assessment

DT is assessed at the end of each half-termly unit on Sonar which links directly to the objectives used for planning. DT is gently assessed to ensure all children have access to the appropriate equipment and can explore different techniques to make and evaluate at an appropriate level. The subject leader looks at assessments and discusses with teachers any trends in gaps or misconceptions.

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## EYFS

Our children's journey in Design and Technology starts in EYFS and is taught across all areas of learning. By the end of their time in EYFS children will have had opportunities to

- Plan, make decisions about how to approach a task, solve a problem and reach a goal. **(Creating and Thinking Critically- Thinking)**
- Use simple tools and techniques competently and appropriately. Select appropriate resources and adapt work where necessary. Select tools and techniques. **(Expressive Arts and Design)**
- Talk about why things happen and how things work. **(Understanding the World- The World)**
- Check how well their activities are going and change strategy as needed **(Creating and Thinking Critically- Thinking)**
- Can talk about some of the things they have observed such as plants, animals, natural and found objects. **(Understanding the World- The World)**
- Show some understanding that good practices with regard to exercise, eating, sleeping and hygiene can contribute to good health. **(Physical Development- Health and Self Care)**

## SEND

Our children with SEND access the DT curriculum through quality first teaching through careful teacher assessment. Lessons are planned and resourced to enable all children to access their learning at an appropriate level, helping them to engage and be challenged. Teachers use a range of methods to support children with SEND including adult or peer support, providing alternative ways of recording, for example and pre-teaching key vocabulary. Children with more complex SEND will access similar content to their peers but at an appropriate level.

**Impact - Our curriculum aims to develop the creativity and imagination, enabling pupils to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values.**

### The programme of study for Design and Technology at KS1

By the end of their time at Lindfield children will be able to:

#### Designing

- work confidently within a range of contexts, such as imaginary, story-based, home, school, gardens, playgrounds, local community, industry, and the wider environment
- say how they will make their products suitable for their intended users
- use simple design criteria to help develop their ideas

### The programme of study for Design and Technology at KS2

By the end of their time at Lindfield children will be able to:

#### Designing

- work confidently within a range of contexts, such as the home, school, leisure, culture, enterprise, industry, and the wider environment
- indicate the design features of their products that will appeal to intended users
- develop their own design criteria and use these to inform their ideas
- carry out research, using surveys, interviews, questionnaires, and web-based resources
- model their ideas using prototypes and pattern pieces
- use annotated sketches, cross-sectional drawings and exploded diagrams to develop and communicate their ideas.

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## **Making**

- plan by suggesting what to do next
- select from a range of tools and equipment, explaining their choices
- select from a range of materials and components according to their characteristics
- follow procedures for safety and hygiene
- use a range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components
- measure, mark out, cut, and shape materials and components
- assemble, join, and combine materials and components
- use finishing techniques, including those from art and design

## **Evaluating**

- talk about their design ideas and what they are making
- make simple judgements about their products and ideas against design criteria
- suggest how their products could be improved.

Pupils should explore:

- what products are
- who products are for
- what products are for
- how products work
- how products are used
- where products might be used
- what materials products are made from
- what they like and dislike about products

- use computer-aided design to develop and communicate their ideas
- generate innovative ideas, drawing on research

## **Making**

- select tools and equipment suitable for the task
- select materials and components suitable for the task
- explain their choice of materials and components according to functional properties and aesthetic qualities
- order the main stages of making
- produce appropriate lists of tools, equipment, and materials that they need
- formulate step-by-step plans as a guide to making
- follow procedures for safety and hygiene
- use a wider range of materials and components than KS1, including construction materials and kits, textiles, food ingredients, mechanical components, and electrical components
- measure, mark out, cut, and shape materials and components with some accuracy
- assemble, join, and combine materials and components with some accuracy
- apply a range of finishing techniques, including those from art and design, with some accuracy

### **In Years 5 and 6 pupils should also:**

- accurately measure, mark out, cut, and shape materials and components
- accurately assemble, join, and combine materials and components
- accurately apply a range of finishing techniques, including those from art and design
- use techniques that involve several steps
- demonstrate resourcefulness when tackling practical problems

## **Evaluating**

- identify the strengths and areas for development in their ideas and products
- consider the views of others, including intended users, to improve their work.
- refer to their design criteria as they design and make
- use their design criteria to evaluate their completed products

### **In Years 5 and 6 pupils should also:**

- critically evaluate the quality of the design, manufacture, and fitness for purpose of their products as they design and make
- evaluate their ideas and products against their original design specification
- how well products achieve their purposes and how well products meet user needs and wants
- who designed and made the products
- where and/or when products were designed and made
- whether products can be recycled or reused

### **In Years 5 and 6 pupils should also investigate and analyse:**

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## Technical Knowledge

- know about the simple working characteristics of materials and components
- know about the movement of simple mechanisms such as levers, sliders, wheels, and axles
- know how freestanding structures can be made stronger, stiffer, and more stable
- know that a 3-D textiles product can be assembled from two identical fabric shapes
- know that food ingredients should be combined according to their sensory characteristics
- know the correct technical vocabulary for the projects they are undertaking

## Cooking and Nutrition

- know that all food comes from plants or animals and has to be farmed, grown elsewhere (e.g. home) or caught
- how to name and sort foods into the five groups in The Eatwell Guide
- how to prepare simple dishes safely and hygienically, without using a heat source
- how to use techniques such as cutting, peeling, and grating

- how much products cost to make, how innovative products are, how sustainable the materials in products are, what impact products have beyond their intended purpose -inventors, designers, engineers, chefs, and manufacturers who have developed ground-breaking products.

## Technical Knowledge

- know how to use learning from science/ maths to design and make products that work
- know how to use learning from to help design and make products that work
- know that materials have both functional properties and aesthetic qualities
- know that materials can be combined and mixed to create more useful characteristics
- know that mechanical and electrical systems have an input, process, and output
- know the correct technical vocabulary for the projects they are undertaking
- know how mechanical systems such as levers and linkages or pneumatic systems create movement
- know how simple electrical circuits and components can be used to create functional products
- know how to program a computer to control their products
- know how to make strong, stiff shell structures
- know that a single fabric shape can be used to make a 3D textiles product
- know that food ingredients can be fresh, pre-cooked, and processed

## In Years 5 and 6 pupils should also know:

- What mechanical systems such as cams, pulleys, or gears create movement
- how more complex electrical circuits and components can be used to create functional products
- how to program a computer to monitor changes in the environment and control their products
- how to reinforce and strengthen a 3D framework
- that a 3D textiles product can be made from a combination of fabric shapes

## Cooking and Nutrition

- know that food is grown (such as tomatoes, wheat, and potatoes), reared (such as pigs, chickens, and cattle) and caught (such as fish) in the UK, Europe, and the wider world
- that seasons may affect the food available
- prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source
- how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading, and baking
- that a healthy diet is made up from a variety and balance of different food and drink, as depicted in The Eatwell Guide
- that recipes can be adapted to change the appearance, taste, texture, and aroma
- that different food and drink contain different substances – nutrients, water, and fibre – that are needed for health

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Design and Technology Skills Progression				
Designing	Making	Technical Knowledge	Cooking	Evaluating
<p><b>Understanding contexts, users, and purposes</b></p> <p><b>Year 1</b> Learning to Children will be presented with an issue involving the school environment and design criteria for creating bird feeders for the school.</p> <p><b>Year 2</b> Children will solve a problem stemming from the story 'The Lighthouse Keepers Lunch' They will think about using a pulley system enabling the Lighthouse keeper to collect his lunch.</p> <p><b>Year 3</b> Learning to Exploring the various money containers designed by Orla Kierly and Jimmy Choo and establishing how 'user friendly' each design is before designing a money bag for pirates to keep their gold coins.</p> <p><b>Year 4</b> Children will think about seasonality and gather information about the preferences of their peers before designing their own cookies.</p> <p><b>Year 5</b> Children will find out how young people started their own business with an idea. In preparation for Business Week Children will</p>	<p><b>Planning</b></p> <p><b>EYFS</b> Children stitch and glue textiles to create gingerbread puppets. They use construction kits and model with boxes and wooden components to make vehicles.</p> <p><b>Year 1</b> Children explore, and compare building houses with straw, bricks, and twigs. They will select from a range of tools and equipment; Cello tape dispenser, hole punches, scissors, and craft equipment to create their own alien.</p> <p><b>Year 2</b> Children write step by step instructions for making a lighthouse, stating tools, materials and equipment needed.</p> <p><b>Year 3</b> After designing pirate money bag children will select their own fabrics, fastenings, and items for decoration.</p> <p><b>Year 4</b> Children will produce appropriate lists of tools, equipment, and materials that they need and plan the assembly of their torch using diagrams.</p> <p><b>Year 5</b></p>	<p><b>Making Products Work</b></p> <p><b>EYFS</b> Investigating wheels and axels with construction kits and then with wooden components. Children will overstitch with support to join 2 same shaped pieces of fabric to make a puppet.</p> <p><b>Year 1</b> Finding out where levers are used in everyday life and exploring how levers and sliders can make an object move. Making moving pictures with levers and sliders. Children will learn how to use hole-punches and split pins safely to help them create their own aliens.</p> <p><b>Year 2</b> Using overstitch to join, then fill 2 pieces of same shape fabric to create a 3D object. The Children will investigate pulleys and find out how they help us in everyday life before using a pulley system in their own model.</p> <p><b>Year 3</b> Using running stitch to make a 3D object out of a single fabric shape. Learning how to add buttons and fastenings by stitching and threading. Children will learn how to use triangles and tetrahedrons</p>	<p><b>Where food comes from</b></p> <p><b>EYFS</b> Incubating hen and duck eggs to observe hatching. Learning how eggs are cooked. Visit to local farm. Finding out which foods are produced by which animals.</p> <p><b>Year 1</b> Find out about foods that grow and sort foods into foods that grow on trees, above and below ground.</p> <p><b>Year 2</b> Various foods are grown on farms, orchards, and plantations. Also finding out that different foods grow in different climates.</p> <p><b>Year 3</b> Sorting different foods according to the climates they need to grow. Finding out how food from far away is packaged and transported.</p> <p><b>Year 4</b> Sorting foods according to the seasons that grow. Considering seasonality and the benefits of using locally grown foods that are in season.</p> <p><b>Year 5</b> Exploring foods that are produced from apples, then packaged and manufactured.</p>	<p><b>Own ideas and products</b></p> <p><b>EYFS</b> Children will talk about how they will make their vehicle, encouraged to change strategy as needed and make choices about how to improve their vehicles.</p> <p><b>Year 1</b> After making their own bird feeder children will evaluate their own product considering improvements.</p> <p><b>Year 2</b> They will taste and evaluate their own smoothies. They will also test out and evaluate their lighthouse model referring to the design criteria.</p> <p><b>Year 3</b> Learning to Children will show their pirate bag to a partner and test to see if pirate gold will fall out. They will evaluate referring to the design criteria.</p> <p><b>Year 4</b> Children identify strengths and areas for development, evaluating their own torches. They will test out their bridges against the design criteria and discuss which structures/ materials were best for the purpose. They will work in small group tasting and evaluating their cookies.</p>

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<p>research favourite colours, flavours, characters, activities to inform their choices. They will work collaboratively to create their own business plans</p> <p><b>Year 6</b> Children will generate ideas to solve problems or irritations in our everyday lives. They will evaluate and develop their ideas throughout the process before deciding on their preferred design.</p>	<p>The children make their own written step by step plans explaining how to make a balloon powered vehicle, including materials and equipment needed. They will research, cost and plan products to sell during Business Week.</p> <p><b>Year 6</b> made Children design shelter prototypes and plan their making using appropriate lists of tools, equipment, and materials.</p>	<p>in their models to create sturdy structures.</p> <p><b>Year 4</b> Learning how to use a simple electrical circuit with switches to create a functional torch. Children will build on their knowledge of sturdy structures learning how using triangular shapes and trusses will create a stronger bridge.</p> <p><b>Year 5</b> Use their knowledge of forces to create working models. Children learn that food ingredients can be fresh, pre-cooked, and processed</p> <p><b>Year 6</b> Building on knowledge of structures children will build frame structures prototypes before working collaboratively with a design brief and given materials to create a sturdy shelter outside.</p>	<p><b>Year 6</b> The Dig for Victory campaign. Organising a weekly food allowance into the different food groups including foods that could have been grown in parks, gardens, and other communal spaces.</p>	<p><b>Year 5</b> Children will test out their wind powered vehicles. Collect and compare measurements and use these to produce detailed evaluations.</p> <p><b>Year 6</b> Designing Chindogu inspired products, children will evaluate and develop their ideas throughout the design process before deciding on their preferred design. Children develop their preferred design considering if it is user friendly, functional, and inclusive.</p>
<p><b>Generating, developing, modelling, and communicating ideas</b></p> <p><b>EYFS</b> Finding out how cars are made children draw and talk about their own ideas for making their own wheeled vehicle.</p> <p><b>Year 1</b> Children will design and label their own bird feeders considering materials available.</p> <p><b>Year 2</b> and design, label and list equipment needed for a pulley system enabling the Lighthouse keeper to collect his lunch.</p> <p><b>Year 3</b> Children will design their own Pirate Money Containers using annotated sketches, labelling types</p>	<p><b>Practical Skills and Techniques</b></p> <p><b>EYFS</b> Children have many opportunities to use scissors and glue. They are taught to use saws safely with 1:1 supervision and use them to cut axles for their vehicles. They will use needles safely to over stitch through pre-punched holes.</p> <p><b>Year 1</b> Children use split pins, hole punches, scissors, and glue to make their own aliens. They learn how to make an object move using a lever to make a moving picture.</p> <p><b>Year 2</b> Revisiting safety rules, children use saws and rulers, measuring and cutting dowel to make a pulley axle. They will use needles safely</p>		<p><b>Food preparation, cooking, and nutrition</b></p> <p><b>EYFS</b> Learning to peel and taste various fruits and vegetables during snack times. Measuring, spooning, stirring ingredients to make pancakes. Mixing, stirring, and kneading ingredients to make bread.</p> <p><b>Year 1</b> Healthy diet (CC science) Using Bridge Hold, Fork Secure and Claw cutting methods to slice fruits and create a fruit salad.</p> <p><b>Year 2</b> Healthy diet (CC science) Using Bridge Hold, Fork Secure and Claw cutting methods, learning how to grate harder fruits and vegetables and combine ingredients to create smoothies.</p>	<p><b>Existing products</b></p> <p><b>EYFS</b> Learning to Children will find out how cars are made and look at a variety of car designs to encourage them to describe and explain their likes and dislikes.</p> <p><b>Year 1</b> Finding out about the Design company Blue and Green and their philosophy on designing for the environment. Children will be introduced to a design brief and evaluate a selection of bird feeders referring to the design criteria.</p> <p><b>Year 2</b> Children will be introduced to graphic designer Gravy and looking at his logo and packaging for Innocent Smoothies. They will look at logos and consider which are effective and why.</p>

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<p>of fastening, stitches, and materials.</p> <p><b>Year 4</b> Children will develop cross sectional and exploded diagrams to communicate the workings of their torch designs. Children will conduct research to establish favourite flavours and types of biscuits/ cookies in preparation for the design task.</p> <p><b>Year 5</b> In preparation for Business Week Children will work in groups generating and costing ideas, deciding on a company names, logo and strap line.</p> <p><b>Year 6</b> Children will develop their preferred Chindogu inspired design considering if it is user friendly, functional, and inclusive and produce annotated sketches, cross sectional diagrams and potential materials and costings.</p>	<p>to overstitch 2 same shape fabric pieces.</p> <p><b>Year 3</b> Children will use needles safely to running stitch around a single fabric piece and attach fastenings. To make pyramids children will experiment with construction kits, stacking cups, and sticks to create sturdy structures.</p> <p><b>Year 4</b> To make bridges children will build structures with construction kits, paper modelling, straws, and sticks. They will assemble electrical circuits with bulbs and switches and incorporate this inside a model to create a working torch.</p> <p><b>Year 5</b> Children revisit safety rules for using saws and glue guns. They will accurately measure and saw dowel to make axles for vehicles and attach air hose and bearings with hot glue.</p> <p><b>Year 6</b> Children will use triangulation to create sturdy, frame structures initially using a small-scale prototype and finally a large-scale collaborative shelter.</p>		<p><b>Year 3</b> Considering additives and sugars found in most shop bought drinks. Using Bridge Hold, Fork Secure and Claw cutting methods to cut lemons. Using manual juicers and sieves to make healthy lemonade.</p> <p><b>Year 4</b> Follow a recipe, measure, and combine and knead ingredients to make cookies.</p> <p><b>Year 5</b> Exploring various cooking methods considering which are healthier ways to cook before cooking apples.</p> <p><b>Year 6</b> Planning a healthy meal using only WWII rations and foods grown as part of the Dig for Victory campaign.</p>	<p><b>Year 3</b> Children will find out what fashion designers do and look at and compare products designed by Orla Kierly and Jimmy Choo; thinking about designers having a distinct style.</p> <p><b>Year 4</b> Children will be introduced to chef Jamie Oliver. They will do a product analysis on types of biscuits and cookies.</p> <p><b>Year 5</b> Children will look at a range of products manufactured and packaged using apples. In preparation for business week children will think about how much products cost to make, how innovative products are and how sustainable the materials in products are.</p> <p><b>Year 6</b> Children will be introduced to the Japanese art of Chindogu and will evaluate the products determined whether they are user friendly, functional, and inclusive.</p>
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Yr	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	<p>Me and My World</p> <p>Structures/Food <b>Which fruits have delicious skin?</b> Children introduced to school routines: Snack time, learning how to share and peel fruit. Construction: exploring joining different types of building equipment. <a href="#">Link to Maths Numbers and measures</a></p>	<p>Me and My World</p> <p>Textiles <b>How do we join fabric?</b> Making gingerbread people hand puppets for storytelling. Over stitching and joining puppet shapes. <a href="#">Link to Physical-</a></p>	<p>Vroom Vroom</p> <p>Food <b>What happens when we mix wet and dry ingredients?</b> Making pancakes; spooning, stirring, and measuring ingredients. <a href="#">Link to Understanding the World- The World, Physical</a></p>	<p>Vroom Vroom</p> <p>Mechanisms <b>How do wheels turn?</b> Exploring wheels and axles. Designing and making vehicles. <a href="#">Link to Physical- Fine Motor/ Mathematics- Measures</a></p>	<p>Down on the Farm</p> <p>Food <b>Who will help me make the bread?</b> Grinding wheat to make flour for the Little Red Hen. Making bread for the Little Red Hen. Learning to mix/ stir and knead ingredients <a href="#">Link to Understanding the World- The World</a></p>	<p>Down on the Farm</p> <p>Food <b>Where does milk come from?</b> Visit to Farm. Finding out where food comes from. <a href="#">Link to Understanding the World- The World</a></p>
EYFS Key Vocab	Fruit and Vegetable names. Peel, skin, pips, seeds.	Stitching, thread, fabric, needle	Mix, stir, <i>measure, ingredients</i>	Wheels, axles, design vehicle	Mix, stir and knead, wheat, flour, types of bread.	<i>Farm animal names and their products</i>
1	<p>Out and About with the Jolly Postman</p> <p>Structures <b>Is the brick house always the strongest?</b> Building a stable structure for the 3 Little Pigs. <a href="#">Link to Science Materials</a></p>	<p>Out and About with the Jolly Postman</p> <p>Mechanisms <b>How can we make pictures move?</b> Exploring levers in products. Designing and making a picture with moving parts.</p>	<p>To Infinity and Beyond</p> <p>Food <b>How do astronauts stay healthy?</b> Astronaut training week sorting and finding out about which foods we need to keep us healthy. <a href="#">Link to Science and PSHE</a></p>	<p>To Infinity and Beyond</p> <p>Food <b>Can we make a healthy snack by slicing?</b> Learning Bridge Hold, Fork Secure and Claw cutting methods to slice and fruits and create a fruit salad.</p>	<p>Woodland Wonders</p> <p>Design <b>What does a bird need to eat?</b> Evaluating existing bird feeders, finding out about Green and Blue Design Company. Designing and making bird feeders. <a href="#">Link to Science Materials</a></p>	<p>Woodland Wonders</p> <p>Food <b>Where does it grow?</b> Finding out which foods grow in Peter's Rabbits Garden and understanding that fruits and vegetables grow on different types of plants <a href="#">Link to Science Growing</a></p>
1 Key Vocab	Sturdy, strong, rigid, stable.	<i>pivot, lever</i>	<i>balanced diet, energy, fruits and vegetables, carbohydrates, fats and sugars, protein, dairy</i>	<i>Cut, slice, bridge hold, fork secure and claw cutting methods.</i>	<i>Design, waterproof and waterproof materials.</i>	<i>Plant, root vegetable, seeds, ploughed, soil, harvest</i>

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2	<p>Fire and Ice</p> <p>Textiles</p> <p><b>Can fabric be 3D?</b></p> <p>Designing and Making Christmas decorations by using stitching to join fill and decorate felt shapes.</p>	<p>Scales and Tales</p> <p>Food</p> <p><b>Does all fruit grow on trees?</b></p> <p>Finding out how fruits and vegetables are farmed. Designing and Making Smoothies. Reinforce cutting skills and learning to grate and peel softer foods. Finding out about Gravy the graphic designer and designing a logo for their own smoothies.</p> <p><a href="#">Links to Geography, Science and Maths Measures</a></p>	<p>Splish, Splash, Splosh</p> <p>Mechanisms</p> <p><b>Is a pulley useful?</b></p> <p>Exploring pulleys. Designing and making a pulley system to help the Lighthouse Keeper lower his lunch basket to the ground.</p>
	<p>2</p> <p>Key Vocab</p> <p>Stitching, thread, fabric, needle eye, over-stitch, starting and finishing off.</p>	<p>Farming, plantation, orchard, cut, slice, bridge hold, fork secure and claw cutting methods, grater, peeler, logo.</p>	<p>Pulley, axle, load</p>
3	<p>Skulls and Crossbones</p> <p>Textiles</p> <p><b>Where should the pirates keep their gold?</b></p> <p>Designing and Making pirate money bags. Learning to use running stitch to join fabric and to attach fastenings.</p>	<p>Footprints in the Past</p> <p>Structures</p> <p><b>Why are the pyramids so sturdy?</b></p> <p>Investigating pyramids and other structures. Learning to add diagonal struts to make structures stronger and sturdier. Construction challenges creating sturdy structures.</p> <p><a href="#">Link to Maths Shapes</a></p>	<p>An African Adventure</p> <p>Food</p> <p><b>What are food miles?</b></p> <p>Finding out how far our food has travelled and how some foods need a specific climate to grow. Children will make their own healthier lemonade, learning how to use a simple manual juicer.</p> <p><a href="#">Links to Maths Measures, Science and Geography</a></p>
	<p>3</p> <p>Key Vocab</p> <p>Design Brief, Stitching, thread, fabric, <i>running stitch</i>, starting, and finishing off, fastenings, <i>appliqué</i> and seam.</p>	<p>Structure, building, stable, sturdy, support, strengthen, stabilise, triangle, tetrahedron, wider base.</p>	<p>Food miles, juicer, bridge hold, sieve, whisk, citrus fruits, sweet, sour, vitamin C</p>
4	<p>Journey into the Unknown</p> <p>Design</p> <p><b>Do exploded diagrams explode?</b> Using switches and electrical systems to create a collaborative light up castle inspired by The Journey by Aaron Becker.</p> <p><a href="#">Link to Science Electricity</a></p>	<p>Stones 'n' Bones</p> <p>Structures</p> <p><b>Which type of bridge is the strongest?</b></p> <p>Children will solve the problem of Ug from 'Boy Genius of the Stone age' by Raymond Briggs retrieving a rock from the river. Children will build sturdy bridges using diagonal struts and truss structures.</p>	<p>Amazon Adventures</p> <p>Food</p> <p><b>Are strawberries just for the summer?</b></p> <p>Designing and making Fair trade cookies. Learning about seasonality, Fairtrade ingredients and how to research and evaluate products. Children will design, measure ingredients, then follow a simple recipe to make cookies.</p> <p><a href="#">Link to Maths Measures, Data Handling and Geography</a></p>
	<p>4</p> <p>Key Vocab</p> <p>Exploded Diagram, Toggle Switch, Slide Switch, and Push Switch. Flange, tab, Rotary Cutter, Cutting Mat, Safety Ruler.</p>	<p>Bridges: Beam, Truss, Arch and Suspension. Design Brief, Viaduct, Truss, Diagonal Struts,</p>	<p>Seasonality, fair-trade, product research, design brief, consumer, combine, knead</p>

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5	<p style="text-align: center;">Aiming High</p> <p style="text-align: center;">Food</p> <p style="text-align: center;"><b>How many ways can you cook an apple?</b></p> <p>To help Snow White's stepmother rethink her poison apple, the children will learn about a range of cooking techniques, considering which one is the healthiest way to cook. They will recap the Eatwell Plate and discuss which techniques use fats and oils. <a href="#">Link to Science</a></p>	<p style="text-align: center;">Groovy Greeks</p> <p style="text-align: center;">Mechanisms</p> <p style="text-align: center;"><b>Can you win a chariot race with air?</b> Children will find out about the chariot racing in ancient Greece and will build, test, and evaluate their own balloon powered chariot. <a href="#">Link to Science</a></p>	<p style="text-align: center;">Twisted Tales</p> <p style="text-align: center;">Structures</p> <p style="text-align: center;"><b>What is a net?</b></p> <p>Children will be learning about shell structures and how to create 3D shapes from nets. They will use computers to explore 3D modelling and design a house. <a href="#">Link to Computing and Maths Shape.</a></p>
5 Key Vocab	Boiling, grilling, steaming, baking, frying, poaching, carbohydrates, protein, dairy, balanced diet.	Wheels, axles, bearings, gears, pulleys, levers	Shell structures, Nets, tabs, 2D to 3D
6	<p style="text-align: center;">The Battle of Britain</p> <p style="text-align: center;">Structures</p> <p style="text-align: center;"><b>Should we have called them Paterson shelters?</b></p> <p>Investigating structures and finding out how to make structures more stable. Visiting and learning about the WWII Anderson Shelters. Designing and making individual prototypes and collaborative shelters outside. <a href="#">Link to History</a></p>	<p style="text-align: center;">Magical Mysteries</p> <p style="text-align: center;">Food</p> <p style="text-align: center;"><b>Could you eat well during the blitz?</b></p> <p>Planning a <b>healthy meal</b> using only WWII rations and foods grown as part of the Dig for Victory campaign. Learning to use information on food labels to make healthy choices. <a href="#">Link to History and Science</a></p>	<p style="text-align: center;">Legacy</p> <p style="text-align: center;">Design</p> <p style="text-align: center;"><b>Is a butter stick a useful product?</b> Exploring Chindogu; Japanese inventions for everyday use. Learning about the designers that have designed and created many everyday products. Designing their own product solving common everyday problems.</p>
6 Key Vocab	Frame structures, rigid, sturdy, bracing, triangulation, skeleton structure, prototype	balanced diet, <i>energy, fruits</i> , and vegetables, carbohydrates, fats and sugars, protein, dairy, calories, saturated fat, seasonality, seasonal produce, portions, food plan	Design brief, product, consumer, costings