Oakham Primary School

Design and Technology Policy and Curriculum

Approved by Governors on:	**08/05/24**
Signature of Chair of Governors:	
Lead Personnel:	**A Mills**
Date to be reviewed:	**08/05/26**

Contents

DT Curriculum

There are three areas of the DT curriculum:

- Structures & Mechanisms
- Textiles
- Cooking & Nutrition

Each year group will need to cover each of these three areas over the course of the school year and teachers will need to ensure that all the theoretical and practical skills are covered for their year group.

As these areas require a lot of planning, preparation, time and resourcing, one area will be covered each school term and are blocked together; taught over a one-week period, replacing other lessons taught in the afternoon.

Each area has as much theory as there are practical skills but these can be taught in fewer lessons to ensure there is more time available for the practical lessons. Also, there are a lot of links to other areas of the curriculum (mainly science), so if skills have already been covered in these lessons, they do not need to be repeated but may be revised if necessary.

Our DT curriculum at Oakham will be following the 'Kapow' scheme of learning, where each year group will be assigned 3 units (one of each of the three areas). Each unit consists of 4 lessons to be taught across the week. Each lesson has a step-by-step plan to follow to teach the lesson, links to downloadable resources, lists of other resources required for the lesson, question prompts, key vocabulary and some have slides/videos where needed. All of these are available on the website https://www.kapowprimary.com and everyone should have a log in to access the resources.

Each unit for each year group will be put onto a yearly planner, so staff will know when they are teaching a particular unit and have time to prepare resources. These may be subject to change if there are any clashes with other events happening on these weeks. Each year group will be assigned a box of resources that are specific to their units they are teaching, which can then be replenished at the end of the unit. Some consumables may need to be purchased by staff which can be reimbursed through petty cash. Reusable resources that may be needed across year groups will be kept in each phases respective resource rooms.

Each DT unit will follow a 4-step process to show a progression of skills across each year group:

- Design
- Make
- Evaluate
- Technical Knowledge

DT Policy

Intent – what does the Design and Technology curriculum intend to do?

At our school we intend that children should master Design and Technology to such an extent that they can go on to have careers within Design and Technology and make use of design and technology effectively in their everyday lives.

Our children will be taught Design and Technology in a way that ensures progression of skills, and follows a sequence to build on previous learning.

Our children will gain experience and skills of a wide range of formal elements of design and concepts of technology in a way that will enhance their learning opportunities, enabling them to use design and technology across a range of subjects to be creative and solve problems, ensuring they make progress.

Implementation – how is the curriculum implemented?

We follow a broad and balanced Design and Technology curriculum that builds on previous learning and provides both support and challenge for learners. We follow a Design and Technology scheme that ensures a progression of skills and covers all aspects of the Design and Technology curriculum.

All classes will have a scheduled Design and Technology week each term to cover the three areas of Design & Technology.

Children's work and pictures of their work will be kept in sketch books for reference and assessment and teachers will be required to fill out an end of unit reflection sheet to identify what skills were covered during that unit, and provide evidence to accompany them.

We want to ensure that Design and Technology is embedded in our whole school curriculum and that opportunities for enhancing learning by using design and technology are always taken.

Impact – what progress will children make?

Our children enjoy and value Design and Technology and know why they are doing things, not just how. Children will understand and appreciate the value of Design and Technology in the context of their personal wellbeing and the creative and cultural industries and their many career opportunities.

Progress in Design and Technology is demonstrated through regularly reviewing and scrutinising children's work, in accordance with our Design and Technology assessment policy to ensure that progression of skills is taking place. Namely through:

- Looking at pupils' work, especially over time as they gain skills and knowledge.
- Observing how they perform in lessons.
- Talking to them about what they know.
- Review of teacher reflection sheets/evidence bundles

The Design and Technology curriculum will contribute to children's personal development in creativity, independence, judgement and self-reflection. This would be seen in them being able to talk confidently about their work, and sharing their work with others.

Progress will be shown through outcomes and through the important record of the process leading to them.

National Curriculum Skills

KS1

When designing and making, pupils should be taught to:

Design

- Design purposeful, functional, appealing products for themselves and other users based on design criteria
- Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make

- Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing
- Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate

- Explore and evaluate a range of existing products
- Evaluate their ideas and products against design criteria

Technical knowledge

- Build structures, exploring how they can be made stronger, stiffer and more stable
- Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.
- Use the basic principles of a healthy and varied diet to prepare dishes
- Understand where food comes from.

National Curriculum Skills

KS2

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.
- Understand and apply the principles of a healthy and varied diet
- Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
- Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

Design – Skills Progression

	Structures & Mechanisms	Textiles	Cooking & Nutrition
Year 1	• Learning the importance of a clear design criteria • Including individual preferences and requirements in a design • Explaining how to adapt mechanisms, using bridges or guides to control the movement • Designing a moving story book for a given audience • Designing a vehicle that includes wheels, axles and axle holders, which will allow the wheels to move • Creating clearly labelled drawings which illustrate movement	• Using a template to create or design a puppet	• Design packaging for a drink, to reflect the ingredients
Year 2	• Generating and communicating ideas using sketching and modelling • Learning about different types of structures, found in the natural world and in everyday objects • Creating a class design criterion for a moving monster • Designing a moving monster for a specific audience in accordance with a design criterion • Selecting a suitable linkage system	• Designing a pouch	• Designing a healthy wrap based on a food combination which work well together

	to produce the desired motions • Designing a wheel • Selecting appropriate materials based on their properties		
Year 3	• Designing a castle with key features to appeal to a specific person/ purpose • Drawing and labelling a castle design using 2D shapes, labelling: - the 3D shapes that will create the features - materials need and colours • Designing a toy which uses a pneumatic system • Developing design criteria from a design brief • Generating ideas using thumbnail sketches and exploded diagrams • Learning that different types of drawings are used in design to explain ideas clearly	• Designing and making a template from an existing cushion and applying individual design criteria	• Creating a healthy and nutritious recipe for a savoury tart • using seasonal ingredients, considering the taste, texture, smell and appearance of the dish
Year 4	• Designing a stable pavilion structure that is aesthetically pleasing and selecting materials to create a desired effect • Building frame structures designed to support weight • Designing a shape that reduces air resistance • Drawing a net to create a structure from • Choosing shapes that increase or decrease speed as a result of air resistance	• Writing design criteria for a product, articulating decisions made • Designing a personalised Book sleeve	• Designing a biscuit within a given budget, drawing upon previous taste testing

	• Personalising a design		
Year 5	• Designing a stable structure that is able to support weight • Creating frame structure with focus on triangulation • Designing a pop- up book which uses a mixture of structures and mechanisms • Naming each mechanism, input and output accurately • Storyboarding ideas for a book	• Designing a stuffed toy considering the main component shapes required and creating an appropriate template • Considering proportions of individual components	• Adapting a traditional recipe, understanding that the nutritional value of a recipe alters if you remove, substitute or add additional ingredients • Writing an amended method for a recipe to incorporate the relevant changes to ingredients • Designing appealing packaging to reflect a recipe
Year 6	• Designing a playground featuring a variety of different structures, giving careful consideration to how the structures will be used, considering effective and ineffective designs • After experimenting with a range of cams, creating a design for an automata toy based on a choice of cam to create a desired movement • Understanding how linkages change the direction of a force • Making things move at the same time	• Designing a waistcoat in accordance to specification linked to set of design criteria to fit a specific theme • Annotating designs	• Writing a recipe, explaining the key steps, method and ingredients • Including facts and drawings from research undertaken

Make – Skills Progression

	Structures & Mechanisms	Textiles	Cooking & Nutrition
Year 1	• Making stable structures from card, tape and glue • Following instructions to cut and assemble the supporting structure of a windmill • Making functioning turbines and axles which are assembled into a main supporting structure • Following a design to create moving models that use levers and sliders • Adapting mechanisms	• Cutting fabric neatly with scissors • Using joining methods to decorate a puppet • Sequencing steps for construction	• Chopping fruit and vegetables safely to make a smoothie • Identifying if a food is a fruit or a vegetable • Learning where and how fruits and vegetables grow
Year 2	• Making a structure according to design criteria • Creating joints and structures from paper/card and tape • Making linkages using card for levers and split pins for pivots • Experimenting with linkages adjusting the widths, lengths and thicknesses of card used • Cutting and assembling components neatly • Selecting materials according to their characteristics • Following a design brief	• Selecting and cutting fabrics for sewing • Decorating a pouch using fabric glue or running stitch	• Slicing food safely using the bridge or claw grip • Constructing a wrap that meets a design brief
	• Constructing a range of 3D geometric shapes using nets • Creating special features for individual designs • Making facades from a range of recycled materials	• Following design criteria to create a cushion • Selecting and cutting fabrics with ease using fabric scissors • Sewing cross stitch to join fabric	• Knowing how to prepare themselves and a work space to cook safely in, learning the basic rules to avoid food contamination

Year 3	• Creating a pneumatic system to create a desired motion • Building secure housing for a pneumatic system • Using syringes and balloons to create different types of pneumatic systems to make a functional and appealing pneumatic toy • Selecting materials due to their functional and aesthetic characteristics • Manipulating materials to create different effects by cutting, creasing, folding, weaving	• Decorating fabric using appliqué • Completing design ideas with stuffing and sewing the edges	• Following the instructions within a recipe
Year 4	• Creating a range of different shaped frame structures • Making a variety of free-standing frame structures of different shapes and sizes • Selecting appropriate materials to build a strong structure and for the cladding • Reinforcing corners to strengthen a structure • Creating a design in accordance with a plan • Learning to create different textural effects with materials • Measuring, marking, cutting and assembling with increasing accuracy • Making a model based on a chosen design	• Making and testing a paper template with accuracy and in keeping with the design criteria • Measuring, marking and cutting fabric using a paper template • Selecting a stitch style to join fabric, working neatly sewing small neat stitches • Incorporating fastening to a design	• Following a baking recipe • Cooking safely, following basic hygiene rules • Adapting a recipe
	• Making a range of different shaped beam bridges • Using triangles to create truss bridges	• Creating a 3D stuffed toy from a 2D design • Measuring, marking and cutting fabric accurately and independently	• Cutting and preparing vegetables safely • Using equipment safely, including

Year 5	that span a given distance and supports a load • Building a wooden bridge structure • Independently measuring and marking wood accurately • Selecting appropriate tools and equipment for particular tasks • Using the correct techniques to saws safely • Identifying where a structure needs reinforcement and using card corners for support • Following a design brief to make a pop up book, neatly and with focus on accuracy • Making mechanisms and/ or structures using sliders, pivots and folds to produce movement • Using layers and spacers to hide the workings of mechanical parts for an aesthetically pleasing result	• Creating strong and secure blanket stitches when joining fabric • Using applique to attach pieces of fabric decoration	knives, hot pans and hobs • Knowing how to avoid cross-contamination • Following a step-by-step method carefully to make a recipe
Year 6	• Building a range of play apparatus structures drawing upon new and prior knowledge of structures • Measuring, marking and cutting wood to create a range of structures • Using a range of materials to reinforce and add decoration to structures • Measuring, marking and checking the accuracy of the jelutong and dowel pieces required	• Using template pinning panels onto fabric • Marking and cutting fabric accurately, in accordance with a design • Sewing a strong running stitch, making small, neat stitches and following the edge • Tying strong knots • Decorating a waistcoat - attaching objects using thread and	• Following a recipe, including using the correct quantities of each ingredient • Adapting a recipe based on research • Working to a given timescale • Working safely and hygienically with independence

	• Measuring, marking and cutting components accurately using a ruler and scissors • Assembling components accurately to make a stable frame • Understanding that for the frame to function effectively the components must be cut accurately and the joints of the frame secured at right angles • Selecting appropriate materials based on the materials being joined and the speed at which the glue needs to dry/set	adding a secure fastening	

Evaluate – Skills Progression

	Structures & Mechanisms	Textiles	Cooking & Nutrition
Year 1	• Evaluating a windmill according to the design criteria, testing whether the structure is strong and stable and altering it if it isn't • Suggest points for improvements • Testing a finished product, seeing whether it moves as planned and if not, explaining why and how it can be fixed • Reviewing the success of a product by testing it with its intended audience • Testing mechanisms, identifying what stops wheels from turning, knowing • that a wheel needs an axle in order to move	• Reflecting on a finished product, explaining likes and dislikes	• Tasting and evaluating different food combinations • Describing appearance, smell and taste • Suggesting information to be included on packaging
Year 2	• Exploring the features of structures • Comparing the stability of different shapes • Testing the strength of own structures • Identifying the weakest part of a structure • Evaluating the strength, stiffness and stability of own structure • Evaluating own designs against design criteria • Using peer feedback to modify a final design • Evaluating different designs • Testing and adapting a design	• Troubleshooting scenarios posed by teacher • Evaluating the quality of the stitching on others' work • Discussing as a class, the success of their stitching against the success criteria • Identifying aspects of their peers' work that they particularly like and why	• Describing the taste, texture and smell of fruit and vegetables • Taste testing food combinations and final products • Describing the information that should be included on a label • Evaluating which grip was most effective

Year 3	• Evaluating own work and the work of others based on the aesthetic of the finished product and in comparison, to the original design • Suggesting points for modification of the individual designs • Using the views of others to improve designs • Testing and modifying the outcome, suggesting improvements •	• Evaluating an end product and thinking of other ways in which to create similar items	• Establishing and using design criteria to help test and review dishes • Describing the benefits of seasonal fruits and vegetables and the impact on the environment • Suggesting points for improvement when making a seasonal tart
Year 4	• Evaluating structures made by the class • Describing what characteristics of a design and construction made it the most effective • Considering effective and ineffective designs • Evaluating the speed of a final product based on: the effect of shape on speed and the accuracy of workmanship on performance	• Testing and evaluating an end product against the original design criteria • Deciding how many of the criteria should be met for the product to be considered successful • Suggesting modifications for improvement	• Evaluating a recipe, considering: taste, smell, texture and appearance • Describing the impact of the budget on the selection of ingredients • Evaluating and comparing a range of products • Suggesting modifications
Year 5	• Adapting and improving own bridge structure by identifying points of weakness and reinforcing them as necessary • Suggesting points for improvements for own bridges and those designed by others • Evaluating the work of others and receiving feedback on own work • Suggesting points for improvement	• Testing and evaluating an end product and giving point for further improvements	• Identifying the nutritional differences between different products and recipes • Identifying and describing healthy benefits of food groups

Year 6	• Improving a design plan based on peer evaluation • Testing and adapting a design to improve it as it is developed • Identifying what makes a successful structure • Evaluating the work of others and receiving feedback on own work • Applying points of improvements • Describing changes they would make/ do if they were to do the project again	• Evaluating work continually as it is created	• Evaluating a recipe, considering: taste, smell, texture and origin of the food group • Taste testing and scoring final products • Suggesting and writing up points of improvements in productions • Evaluating health and safety in production to minimise cross contamination

Technical Knowledge – Skills Progression

	Structures & Mechanisms	Textiles	Cooking & Nutrition
Year 1	• Describing the purpose of structures, including windmills • Learning how to turn 2D nets into 3D structures • Learning that the shape of materials can be changed to improve the strength and stiffness of structures • Understanding that cylinders are a strong type of structure that are often used for windmills and lighthouses • Understanding that windmill turbines use wind to turn and make the machines inside work • Understanding that axles are used in structures and mechanisms to make parts turn in a circle • Developing awareness of different structures for different purposes • Learning that levers and sliders are mechanisms and can make things move • Identifying whether a mechanism • is a lever or slider and determining what movement the mechanism will make • Using the vocabulary: up, down, left, right, vertical and horizontal to describe movement • Identifying what mechanism makes a toy or vehicle roll forwards	• Learning different ways in which to join fabrics together: pinning, stapling, gluing	• Understanding the difference between fruits and vegetables • Describing and grouping fruits by texture and taste

	• Learning that for a wheel to move it must be attached to an axle		
Year 2	• Identifying natural and man-made structures • Identifying when a structure is more or less stable than another • Knowing that shapes and structures with wide, flat bases or legs are the most stable • Understanding that the shape of a structure affects its strength • Using the vocabulary: strength, stiffness and stability • Knowing that materials can be manipulated to improve strength and stiffness • Building a strong and stiff structure by folding paper • Learning that mechanisms are a collection of moving parts that work together in a machine • Learning that there is an input and output in a mechanism • Identifying mechanisms in everyday objects • Learning that a lever is something that turns on a pivot • Learning that a linkage is a system of levers that are connected by pivots • Exploring wheel mechanisms • Learning how axels help wheels to move a vehicle	• Joining items using fabric glue or stitching • Identifying benefits of these techniques • Threading a needle • Sewing running stitch, with evenly spaced, neat, even stitches to join fabric • Neatly pinning and cutting fabric using a template	• Understanding what makes a balanced diet • Knowing where to find the nutritional information on packaging • Knowing the five food groups
	• Identifying features of a castle	• Threading needles with greater independence	• Learning that climate affects food growth

Year 3	• Identifying suitable materials to be selected and used for a castle, considering weight, compression, tension • Extending the knowledge of wide and flat based objects are more stable • Understanding the terminology of strut, tie, span, beam • Understanding the difference between frame and shell structure • Understanding how pneumatic systems work • Learning that mechanisms are a system of parts that work together to create motion • Understanding that pneumatic systems can be used as part of a mechanism • Learning that pneumatic systems force air over a distance to create movement	• Tying knots with greater independence • Sewing cross stitch and appliqué • Understanding the need to count the thread on a piece of even weave fabric in each direction to create uniform size and appearance • Understanding that fabrics can be layered for affect	• Working with cooking equipment safely and hygienically • Learning that imported foods travel from far away and this can negatively impact the environment • Learning that vegetables and fruit grow in certain seasons • Learning that each fruit and vegetable gives us nutritional benefits • Learning to use, store and clean a knife safely
Year 4	• Learning what pavilions are and their purpose • Building on prior knowledge of net structures and broadening knowledge of frame structures • Learning that architects consider light, shadow and patterns when designing • Implementing frame and shell structure knowledge • Considering effective and ineffective designs	• Understanding that there are different types of fastenings and what they are • Articulating the benefits and disadvantages of different fastening types	• Understanding the impact of the cost and importance of budgeting while planning ingredients for biscuits • Understanding the environmental impact on future product and cost of production

	• Learning that products change and evolve over time • Learning that all moving things have kinetic energy • Understanding that kinetic energy is the energy that something (object person) has by being in motion		
Year 5	• Exploring how to create a strong beam • Identifying arch and beam bridges and understanding the terms: compression and tension • Identifying stronger and weaker structures • Finding different ways to reinforce structures • Understanding how triangles can be used to reinforce bridges • Articulating the difference between beam, arch, truss and suspension bridges • Knowing that an input is the motion used to start a mechanism • Knowing that output is the motion that happens as a result of starting the input • Knowing that mechanisms control movement • Describing mechanisms that can be used to change one kind of motion into another	• Learning to sew blanket stitch to join fabric • Applying blanket stitch so the space between the stitches are even and regular • Threading needles independently	• Understanding where food comes from - learning that beef is from cattle and how beef is reared and processed • Understanding what constitutes a balanced diet • Learning to adapt a recipe to make it healthier • Comparing two adapted recipes using a nutritional calculator and then identifying the healthier option
	• Knowing that structures can be strengthened by manipulating materials and shapes • Identifying the shell structure in everyday life	• Learning different decorative stitches • Application and outcome of the individual technique	• Learning how to research a recipe by ingredient • Recording the relevant ingredients and

Year 6	(cars, aeroplanes, tins, cans) • Understanding man made and natural structures • Using a bench hook to saw safely and effectively • Exploring cams, learning that different shaped cams produce different follower movements • Exploring types of motions and direction of a motion	• Sewing accurately with even regularity of stiches	equipment needed for a recipe • Understanding the combinations of food that will complement one another • Understanding where food comes from, describing the process of 'Farm to Fork' for a given ingredient

Kapow Unit Coverage

Reception

Cooking & Nutrition:

Textiles:

Structures & Mechanisms:

Year 1

Cooking & Nutrition: Fruit & Vegetables

Textiles: Puppets

Structures & Mechanisms: Wheels & Axles

Year 2

Cooking & Nutrition: A balanced Diet

Textiles: Pouches

Structures & Mechanisms: Baby Bear's Chair

Year 3

Cooking & Nutrition: Eating Seasonally

Textiles: Cushions

Structures & Mechanisms: Pneumatic Toys

Year 4

Cooking & Nutrition: Adapting A Recipe

Textiles: Fastenings

Structures & Mechanisms: Pavillions

Year 5

Cooking & Nutrition: What Could Be Healthier?

Textiles: Stuffed Toys

Structures & Mechanisms: Pop Up Book

Year 6

Cooking & Nutrition: Come Dine With Me

Textiles: Waistcoats

Structures & Mechanisms: Playgrounds

Overview

	Structures & Mechanisms	Textiles	Cooking & Nutrition
Year 1	**Making a moving story book** Explore slider mechanisms and the movement they output, to design, make and evaluate a moving storybook from a range of templates. OR **Constructing a windmill** Inspired by the song, 'Mouse in a windmill', design and construct a windmill for a client (mouse) to live in. Explore various types of windmills, how they work and their key features. OR **Wheels and axles** Learn about the key parts of a wheeled vehicle, to develop an understanding of how wheels, axles and axle holders work. Design and make a moving vehicle.	**Puppets** Explore methods of joining fabric. Design and make a character-based hand puppet using a preferred joining technique, before decorating	**Fruit and Vegetables** Learn to distinguish between fruit and vegetables and where they grow. Design a fruit and vegetable smoothie and accompanying packaging.
Year 2	**Baby Bear's Chair** Explore stability and methods to strengthen structures, to understand Baby Bear's chair weaknesses and develop an improved solution for him to use. OR **Making a Moving Monster**	**Pouches** Learn how to sew a running stitch ready to design, make and decorate a pouch using a template.	**A Balanced Diet** Learn about the food groups (carbohydrates, proteins, fruits and vegetables, dairy, oils and spreads) to understand a balanced diet to develop a healthy wrap.

	Explore levers, linkages and pivots through existing products and experimentation, use this research to construct and assemble a moving monster. OR **Fairground Wheel** Design and create a functional Ferris wheel, learn how different components fit together so that the wheel rotates and the structure stands freely.		
Year 3	**Constructing a castle** Identify and learn about the key features of a castle, before designing and making a recycled-material castle (structure). OR **Pneumatic Toys** Explore pneumatic systems, then apply this understanding to design and make a pneumatic toy including thumbnail sketches and exploded diagrams.	**Cushions** Learn and apply two new sewing techniques – cross-stitch and appliqué. Utilise these new skills to design and make a cushion.	**Eating Seasonally** Learn about various fruits and vegetables, and when, where and why they are grown in different seasons. Discover the relationship between colour and health benefits.
Year 4	**Pavilions** Investigate and model frame structures to improve their stability, then apply this research to design and create a stable, decorated pavilion. OR **Making a Slingshot Car**	**Fastenings** Analyse and evaluate a range of existing fastenings, then devise a list of design criteria to design, generate templates and make a fabric book sleeve.	**Adapting a Recipe** Work in groups to adapt an existing biscuit recipe, whilst taking into account the cost of the ingredients and other expenses against a set budget.

	Using a range of materials, design and make a car with a working slingshot mechanism and house the mechanism using a range of nets.		
Year 5	**Bridges** Test and analyse various types of bridge to determine their strength and stability. Explore material properties and sources, before marking, sawing and assembling a wooden truss bridge. OR **Pop-Up Book** Create a functional four-page pop-up storybook design, using lever, sliders, layers and spacers to create paper-based mechanisms.	**Stuffed Toys** Design a stuffed toy and make decisions on materials, decorations and attachments (appendages), after learning how to sew a blanket stitch.	**What Could Be Healthier?** Discover the farm to fork process, understand the key welfare issues for rearing cattle. Compare the nutritional value of existing sauces and develop a healthier recipe.
Year 6	**Playgrounds** Research existing playground equipment and their different forms, before designing and developing a range of apparatus to meet a list of specified design criteria. OR **Automata Toys** Develop a functional automata window display, to meet the requirements in a design brief. Explore and create cam, follower and axle mechanisms to mimic different movements.	**Waistcoats** Using a combination of textiles skills such as attaching fastenings, appliqué and decorative stitches, design, assemble and decorate a waistcoat for a chosen purpose.	**Come Dine With Me** Develop a three-course menu focused on three key ingredients, as part of a paired challenge to develop the best class recipes. Explore each key ingredient's farm to fork process.

Year 1 – Topic Vocabulary

Mechanisms - Making a moving story book

Assemble	To fix all parts together.
Design	To make, draw or write plans for something.
Design criteria	A set of rules to help you with your ideas and test the success of them.
Evaluation	When you look at the good and bad points about something, then think about how you could improve it.
Mechanism	A system of parts working together.
Model	A practise version, often on a smaller scale, that lets you test out your idea and see how it will look and work.
Sliders	Something that can move from side to side or up and down.
Stencil	A shape which you can draw around.
Target audience	A person or particular group of people at whom a product is aimed.
Template	A stencil which you use to help you draw a shape more easily on to different materials.
Test	To find out whether something works as it should.

Structures - Constructing a windmill

Client	The person who you are designing something for.
Design	To make, draw or write plans for something.
Design criteria	A set of rules to help you with your ideas and test the success of them.
Evaluation	When you look at the good and bad points about something, then think about how you could improve it.
Net	A flat 2D shape, that can become a 3D shape once assembled.
Stable	Object does not easily topple over.
Strong	It doesn't break easily.
Structure	Something that has been made and put together. For example, a building, bridge, chair, table.
Test	To find out whether something works as it should.
Weak	It breaks easily.
Windmill	A structure with sails that are moved by wind.
Windmill axle	The point from which the turbine or sails move.
Windmill structure	The part that makes the windmill stand up.
Windmill turbine	The parts that move in the wind.

Textiles - Puppets

Decorate	To add details to a design to improve its appearance.
Design	To make, draw or write plans for something.
Fabric	A natural or man-made woven or knitted material that is made from plant fibres, animal fur or synthetic material.
Glue	A sticky liquid that can join two things together.
Model	A practise version, often on a smaller scale, that lets you test out your idea and see how it will look and work.
Hand puppet	A toy that you can make move by putting your hand inside it
Safety pin	A 'U' shaped pin with a cap where the needle slots in securely after fastening.
Stencil	A shape that you can draw around.
Technique	A way of doing something to complete a task.
Template	A stencil which you use to help you draw a shape more easily on to different materials.

Mechanisms - Wheels and axles

Accurate	Neat, correct shape, size and pattern with no mistakes.
Axle	A long straight rod which connects to a rotating part (e.g. the wheels of a car).
Axle holder	The part of a mechanism which holds the axle steady.
Chassis	The body of a car.
Design	To make, draw or write plans for something.
Fix	To mend something so that it will work properly again.
Mechanic	A person who can build or mend vehicles or other machines.
Mechanism	Parts of an object that move together to make something work.
Model	A practise version that lets you test out your idea and see how it will look and work.
Test	To find out whether something works as it should.
Wheel	A circular object that turns round. It can be fixed to a vehicle like a car or bicycle to allow the vehicle to move easily over the ground.

Food - Fruit and vegetables

Blender	A machine that mixes ingredients together into a smooth liquid.
Carton	A container made out of card which holds liquid products such as milk and orange juice.
Fruit	The part of a plant that contains seeds.
Healthy	When everything in your body and head feels good.
Ingredients	Items that make up a mixture, for example, foods that make a recipe.
Peel	The tough skin around certain fruits and vegetables, such as oranges.
Peeler	A tool which helps you to remove the tough skin off fruits and vegetables.
Recipe	A set of instructions for making or preparing a food item or dish.
Slice (verb)	To cut pieces off something with a knife.
Smoothie	A combination of fruits and vegetables blended together to make a smooth drink.
Stencil	A shape which you can draw around.
Template	A stencil which you use to help you draw a shape more easily on to different materials.
Vegetable	Parts of plants that can be eaten by people as food. The parts may be the leaves, roots or stem. Vegetables do not contain any seeds

Year 2 – Topic Vocabulary

Mechanisms - Making a moving monster

Design criteria	A set of rules to help designers focus their ideas and test the success of them.
Evaluation	When you look at the good and bad points about something, then think about how you could improve it.
Input	The energy that is used to start something working.
Linkage	Lengths of material (for example, metal or card) that are joined together by pivots, so that the links can move as part of a mechanism.
Mechanical	Something that can move because several pieces work together like a machine.
Mechanism	A collection of parts that work together to create a movement, eg: a bicycle.
Output	Output is the motion that happens as a result of starting the input.
Pivot	The central point, pin, or shaft on which a mechanism turns or swings.
Survey	To ask a group of people questions about something and to use their answers to make improvements.

Structures - Baby bear's chair

Function	How something works.
Man-made	Made by people.
Mould	To form different shapes out of soft, squishy materials.
Natural	Found in nature e.g. spider's web, sheep's wool.
Stable	Object does not easily topple over.
Stiff	A material or object that does not bend easily (e.g. wood).
Strong	Something that is not easily broken (e.g. wood, brick, building).
Structure	Something that has been made and put together and can usually stand on its own (e.g. a building, a bridge, a chair).
Test	To find out whether something works as it should.
Weak	Something that is easily broken (e.g. paper, egg shells).

Textiles - Pouches

Accurate	Neat, correct shape, size and pattern with no mistakes.
Fabric	A natural or man-made woven or knitted material that is made from plant fibres, animal fur or synthetic material.
Knot	A join made by tying two pieces of string or rope together.
Pouch	A small bag made to keep objects safe and to be carried easily.
Running-stitch	A simple style of sewing in a straight line with no overlapping.
Sew	To join or fasten by stitches made using a needle and thread.
Shape	The form of an object.
Stencil	A shape that you can draw around.
Template	A stencil which you use to help you draw a shape more easily on to different materials.
Thimble	A small metal cap to cover and protect your finger when sewing.

Mechanisms - Fairground wheel

Axle	A long straight piece of material which connects to a rotating component (e.g. the wheels of a car).
Decorate	To add details to a design to improve its appearance.
Evaluation	When you look at the good and bad points about something, then think about how you could improve it.
Ferris wheel	A ride at a fairground which carries passengers around a large vertical wheel.
Ferris wheel pod	The container which carries passengers around the ferris wheel.
Mechanism	The parts of an object that move together as part of a machine.
Stable	Object does not easily topple over.
Strong	Something that is not easily broken (e.g. wood, brick, building).
Test	To find out whether something works as it should.
Waterproof	Material that does not allow water pass through it.
Weak	Something that is easily broken (e.g. eggshells).

Food - A balanced diet

Alternative	Changing an ingredient to something different. For example using diet cola instead of full sugar cola or eating a piece of fruit instead of a bag of crisps.
Diet	The food and drink that a person or animal usually eats.
Balanced diet	Eating a variety of foods from all five different food groups.
Evaluation	When you look at the good and bad points about something, then think about how you could improve it.
Expensive	Something that costs a lot of money.
Healthy	When everything in your body and head feels good.
Ingredients	Items that make up a mixture e.g. foods that make a recipe.
Nutrients	Substances in food that all living things need to make energy, grow and develop.
Packaging	The packet or container, which holds a product safe, ready to be sold. It has information on about the product.
Refrigerator	A large kitchen appliance that keeps food and drink cold so that it will keep fresh for longer.
Sugar	An ingredient which is used to make food taste sweet. It comes from the sugar cane plant or from sugar beet.

Year 3 – Topic Vocabulary

Structures - Constructing a castle

2D shapes	Flat objects with 2-dimensions, such as square, rectangle and circle.
3D shapes	Solid objects with 3-dimensions, such as cube, oblong and sphere.
Castle	A type of building that used to be built hundreds of years ago to defend land and be a home for Kings and Queens and other very rich people.
Design criteria	A set of rules to help designers focus their ideas and test the success of them.
Evaluation	When you look at the good and bad points about something, then think about how you could improve it.
Façade	The front of a structure.
Feature	A specific part of something.
Flag	A piece of cloth used as a decoration or to represent a country or symbol.
Net	A 2D flat shape, that can become a 3D shape once assembled.
Recyclable	Material or an object that, when no longer wanted or needed, can be made into something else new.
Scoring	Scratching a line with a sharp object into card to make the card easier to bend.
Stable	Object does not easily topple over.
Strong	It doesn't break easily.
Structure	Something which stands, usually on its own.
Tab	The small tabs on the net template that are bent and glued down to hold the shape together.
Weak	It breaks easily.

Food - Eating seasonally

Climate	The weather and temperature in each country in the world, depends on which climate group that country is located. There are five climate groups: polar, temperate, dry, tropical and mediterranean.
Dry climate	Less than 250mm of rain, fog, sleet or snow in total across a whole year.
Exported	When products or produce, such as fruit and vegetables, are sent to another country.
Imported	When products or produce, such as fruit and vegetables, are brought into a country.
Mediterranean climate	Hot dry summers and cooler wetter winters.
Nationality	Belonging to a particular country (e.g. a person with Italian nationality comes from Italy).
Nutrients	Substances in food that all living things need to make energy, grow and develop.
Polar climate	Long periods of extreme cold.
Recipe	A set of instructions for making or preparing a food item or dish.
Seasonal food	Food that can be harvested and is ready to eat in a particular season.
Seasons	The seasons of the year are spring, summer, autumn and winter.
Temperate climate	Mild temperatures, where the summers are not too hot and the winters are not too cold.
Tropical climate	High temperatures and a lot of rain. This is where you will find the world's rainforests.

Mechanical systems - Pneumatic toys

Exploded-diagram	A diagram which shows all of the parts of a product, including the internal and external parts.
Function	How something works.
Input	Input is the motion used to start a mechanism.
Linkage	Lengths of material (for example, metal or card) that are joined together by pivots, so that the links can move as part of a mechanism.
Mechanism	The parts of an object that move together as part of a machine.
Motion	The movement an object makes when controlled by an input or output (e.g. left, right, up, down).
Net	A 2D flat shape, that can become a 3D shape once assembled.
Output	Output is the motion that happens as a result of starting the input.
Pivot	The central point, pin, or shaft on which a mechanism turns or swings.
Pneumatic system	A mechanism that runs on air or compressed gas.
Thumbnail sketch	Small drawings to get ideas down on paper quickly.

Textiles - Cushions

Accurate	Neat, correct shape, size and pattern with no mistakes.
Appliqué	Appliqué is a type of textiles work where small pieces of cloth are sewn or stuck in a pattern onto a larger piece.
Cross-stitch	A two-stitch style of sewing which forms a cross pattern.
Cushion	A stuffed shape of fabric, used to make sitting more comfortable.
Decorate	To add details to a design to improve its appearance.
Detail	The small features of an object.
Fabric	A natural or man-made woven or knitted material that is made from plant fibres, animal fur or synthetic material.
Patch	A piece of material sewn over the top of a larger piece, sometimes just for decoration and sometimes to cover a hole in the underneath material.
Running-stitch	A simple style of sewing in a straight line with no overlapping.
Seam	Where two edges of cloth are joined or sewn together.
Stencil	A shape that you can draw around.
Stuffing	Soft material used to fill cushions and stuffed toys.
Target audience	A person or particular group of people at whom a product is aimed.

Year 4 – Topic Vocabulary

Structure - Pavilions

Aesthetic	How an object or product looks.
Cladding	A material put on top of another material or on a structure as protection or to improve appearance.
Design criteria	A set of rules to help designers focus their ideas and test the success of them.
Evaluation	When you look at the good and bad points about something, then think about how you could improve it.
Frame structure	A way of building something so that the inside supports are built first and the outside covering is added afterwards as cladding.
Function	The purpose of an object (for example a chair needs to hold a person when sitting down); or how the product works (for example a torch needs to provide light in a dark space).
Inspiration	To gain ideas from different sources such as the internet, magazines and books.
Pavilion	A decorative building or structure for leisure activities.
Reinforce	To make a structure or material stronger, especially by adding another material or element to it.
Stable	Object does not easily topple over.
Structure	Something that has been made and put together and can usually stand on its own (e.g. a building, a bridge, a chair).
Target audience	A person or particular group of people at whom a product is aimed.
Target customer	A person or particular group of people who you expect to buy the product.
Texture	The way that something feels when you touch it (e.g. soft, rough, smooth).
Theme	An idea or specific design that your product or structure is based on (e.g. space-themed).

Textiles - Fastenings

Aesthetic	How an object or product looks.
Assemble	To put parts together.
Book sleeve	A protective cover for a book to keep it from getting damaged.
Design criteria	To help designers focus their ideas and test the success of them.
Evaluation	When you look at the good and bad points about something, then think about how you could improve it.
Fabric	A natural or man-made woven or knitted material that is made from plant fibres, animal fur or synthetic material.
Fastening	Something that holds two pieces of material together securely or shuts something, such as buttons, zips and press-studs.
Prototype	A simple model that lets you test out your idea, how it will look and work.
Net	A flat 2D shape, that can become a 3D shape once assembled.
Running-stitch	A simple style of sewing in a straight line with no overlapping.
Stencil	A shape that you can draw around.
Target audience	A person or particular group of people at whom a product is aimed.
Target customer	A person or particuar group of people who you expect to buy the product.
Template	A stencil you use to help you draw the same shape more easily on to different materials.

Food - Adapting a recipe

Adapt	To change or alter something to fit a given purpose, or to improve it.
Budget	To set an amount of money that can be used for something or for a project and then making sure that you record what you spend and don't spend more than the amount that you set.
Building hire	To pay to use a particular building such as a factory or a professional kitchen for it's facilities.
Equipment	Items and objects which are needed to complete a task.
Evaluation	When you look at the good and bad points about something, then think about how you could improve it.
Flavour	How food or drink tastes (for example, sour, sweet, bitter, salty).
Ingredients	Items that make up a mixture, for example foods that make a recipe.
Method	Following a process or list of instructions.
Net	A flat 2D shape, that can become a 3D shape once assembled.
Packaging	The packet or container that holds a product safe, ready to be sold and has information on about the product.
Prototype	A simple model that lets you test out your idea, showing how it will look and work.
Quantity	An amount of an item.
Recipe	A set of instructions for making or preparing a food item or dish.
Target audience	A person or particular group of people at whom a product is aimed.
Unit of measurement	The unit which you use to measure a quantity. (for example, grams, centimeters, litres).
Utilities	Services such as water, electricity, gas and internet.

Mechanical Systems - Slingshot car

Aesthetic	How an object or product looks.
Air resistance	The level of drag on an object as it is forced through the air.
Chassis	The body of a car.
Design	To make, draw or write plans for something.
Design criteria	A set of rules to help designers focus their ideas and test the success of them.
Function	The purpose of an object (for example a chair needs to hold a person when sitting down); or how the product works (for example a torch needs to provide light in a dark space).
Graphics	Images which are designed to explain or advertise something.
Kinetic energy	The energy that causes an object to move.
Mechanism	The parts of an object that move together as part of a machine.
Net	A flat 2D shape, that can become a 3D shape once assembled.
Structure	Something that has been made and put together and can usually stand on its own (eg a building, a bridge, a chair).

Year 5 – Topic Vocabulary

Mechanical Systems - Pop-up book

Aesthetic	How an object or product looks.
CAD	Computer-aided-design. To use the computer to design a product, diagram or drawing.
Caption	A short piece of writing under a picture that describes or explains the picture.
Design	To make, draw or write plans for something.
Design brief	A description of what you are going to design and make and how it will work.
Design criteria	To help designers focus their ideas and test the success of them.
Exploded-diagram	A diagram which shows all of the parts of a product, including the internal and external parts.
Function	How an object or product operates or works.
Input	Input is the motion used to start a mechanism.
Linkage	A set of bars linked together to form a mechanism.
Mechanism	A system of parts working together.
Motion	The movement an object makes when controlled by an input or output (e.g. left, right, up, down).
Output	Output is the motion that happens as a result of starting the input.
Pivots	A shaft or pin on which something turns.
Prototype	A simple model that lets you test out your idea, showing how it will look and work.
Sliders	A part of a mechanism which allows an object to move from side-to-side (e.g. left-to-right).
Structure	Something which stands, usually on its own.
Template	A stencil made of metal, plastic, or paper, used for making many copies of a shape or to help cut material accurately (e.g. biscuit cutter).

Structures - Bridges

Accurate	Neat, correct shape, size and pattern with no mistakes.
Arch bridge	A bridge which is built with a curved arch.
Beam bridge	A bridge which is built with horizontal beams and vertical pillars.
Bench hook	A tool which hooks onto the edge of the workbench. It's used to hold woodwork still when sawing.
Compression	A squashing force caused when parts of a structure are pushed together.
Coping saw	A saw with a narrow D-shaped metal blade, used for cutting curves in wood.
File	A tool used to smooth down rough edges on wood or metal materials.
Mark out	To measure and mark where a piece of material needs to be cut or shaped.
Reinforce	To make a structure or material stronger, especially by adding another material or element to it.
Sand paper	Strong paper with sand on one side to smooth or polish woodwork.
Set square or Try square	A right-angle triangular plate, wood or metal tool used for drawing lines at 90°, 45°, 60°, or 30°.
Shape	The form of an object.
Structure	Something which stands, usually on its own.
Suspension bridge	A bridge which is supported by vertical cables and suspended by cables which run between pillars that are connected onto either end of the bridge.
Tenon saw	A saw with a flat blade, used for cutting wood in straight lines or angles.
Tension	A stretching force caused by two parts of a structure being pulled apart.
Truss bridge	A bridge which is built from a series of triangular beams.

Textiles - Stuffed toys

Accurate	Neat, correct shape, size and pattern with no mistakes.
Annotate	To add notes to explain your plan or design.
Appendage	Something attached to a larger or more important thing.
Blanket-stitch	A sewing technique that joins two pieces of fabric together.
Design criteria	To help designers focus their ideas and test the success of them.
Detail	The small features of an object.
Evaluation	When you look at the good and bad points about something, then think about how you could improve it.
Fabric	A natural or man-made woven or knitted material, that is made from plant fibres, animal fur or synthetic material.
Sew	To join or fasten by stitches made using a needle and thread.
Shape	The form of an object.
Stuffed toy	A shape of outer fabric sewn together and filled with flexible material. They are also known as plush toys or stuffed animals.
Stuffing	Soft material used to fill cushions and stuffed toys.
Template	A stencil made of metal, plastic, or paper, used for making many copies of a shape or to help cut material accurately (e.g. biscuit cutter).

Food - What could be healthier?

Beef	Meat that comes from a cow.
Cross-contamination	Cross-contamination is how bacteria can spread. It happens when liquid from raw meats or germs from unclean objects touch cooked or ready-to-eat foods.
Farm	Land or water used to produce crops or raise animals for food.
Method	Following a process or list of instructions.
Packaging	The packet which holds a product safe, ready to be sold and has information on about the product.
Research	The collecting of information about a subject.
Welfare	The health and happiness of a person or animal.

Year 6 – Topic Vocabulary

Mechanical Systems - Automata toys

Assembly-diagram	An exploded view diagram of an object, that shows you how to construct an object or order of assembly of various parts.
Automata	Automata toys are sometimes known as mechanical toys or kinetic art. They use hand-powered mechanisms to create movement in a scene of characters.
Axle	In an Automata the axle rotates, turning the cam with it. It is attached to the handle.
Bench hook	A tool which hooks onto the edge of the workbench. It's used to hold woodwork still when sawing.
Clamp	A tool for holding objects together, such as when you are waiting for glue to dry on something that you have glued together.
Cam	A cam is a rotating or sliding piece in a mechanism. It changes rotary motion to linear motion.
Component	One of several parts of which something is made.
Cutting list	An outline drawn true to size on paper, which shows the size and how many of each piece which you need to make for the project.
Dowel	Wood in the shape of a cylinder. Dowels come in all different sizes and thicknesses.
Drill bits	The cutting tools that go in drill to make different sized holes.
Exploded-diagram	A diagram which shows all of the internal and external parts of a product.
Finish	To complete your product with a high quality appearance.
Follower	The post which traces the shape of the cam, rising and falling in a linear or reciprocating motion.
Frame	The rectangular structure which holds the Automata together.
Function	How an object or product operates or works.
Hand drill	A small portable drilling machine for making holes which is operated by hand.
Jelutong	A type of softwood, it is lightweight, easy to cut and shape.
Linkage	A set of bars linked together to form a mechanism.
Mark out	To measure and mark where a piece of material needs to be cut or shaped.
Set square or Engineer's square	A right-angle triangular plate, wood or metal tool used for drawing lines at 90°, 45°, 60°, or 30°.
Tenon saw	A saw with a flat blade, used for cutting wood in straight lines or angles.

Structure - Playgrounds

Apparatus	Equipment designed for recreation and play, such as seesaws and swings.
Bench hook	A tool which hooks onto the edge of the workbench. It's used to hold woodwork still when sawing.
Coping saw	A saw with a narrow D-shaped metal blade, used for cutting curves in woods.
Dowel	Wood in the shape of a cylinder. Dowels come in all different sizes and thicknesses.
Jelutong	A type of softwood, it is lightweight, easy to cut and shape.
Mark out	To measure and mark where a piece of material needs to be cut or shaped.
Modify	To change something to improve or fix it.
Natural materials	Materials which come from nature. (e.g. wood comes from trees)
Plan view	A two-dimensional diagram used to describe a place or object from above with annotations and other details such as measurements.
Playground	An outdoor area for children to play in. They usually have different apparatus to play on such as climbing frames and slides.
Prototype	A simple model that lets you test out your idea and how it will look and work.
Reinforce	To make a structure or material stronger, especially by adding another material or element to it.
Structure	Something which stands, usually on its own.
Tenon saw	A saw with a flat blade, used for cutting wood in straight lines or angles.
User	A person that uses something.
Vice	A piece of equipment used to hold an object still while you work on it.

Food - Come dine with me

Accompaniment	Something which goes well together with other foods and drinks.
Cookbook	A book which contains recipes to make various dishes or foods.
Cross-contamination	Cross-contamination is how bacteria can spread. It happens when liquid from raw meats or germs from unclean objects touch cooked or ready-to-eat foods.
Equipment	Items and objects which are needed to complete a task.
Farm	Land or water used to produce crops or raise animals for food.
Flavour	How food or drink tastes. (e.g. sour, sweet, bitter, salty)
Imperative verb	Also known as 'bossy verbs' because they tell you what to do. You put them at the beginning of a command or action. (e.g. bake, grill, add, heat).
Ingredients	Items that make up a mixture e.g. foods that make a recipe.
Method	A way of carrying out a certain process, following a list of instructions.
Nationality	Belonging to a certain group of people in a particular country.
Preparation	The process of getting ready to make something.
Processed	When foods are passed through multiple processes in a factory to change or preserve it so it keeps for longer.
Reared	To breed and raise livestock. e.g. cows.
Recipe	A set of instructions for making or preparing a food item or dish.
Target audience	A particular group or person who a product is aimed at.
Unit of measurement	The unit which you use to measure a quantity. (e.g. litres)

Textiles - Waistcoats

Adapt	To change or alter something to fit a given purpose, or to improve it.
Annotate	To add notes which explain a plan or design.
Detail	The small features of an object.
Fabric	A natural or man-made woven or knitted material that is made from plant fibres, animal fur or synthetic material.
Fastening	A closing and opening detail on clothing such as buttons, zips and press-studs.
Knot	A join made by tying two pieces of string or rope together.
Properties	The way in which we describe materials for their appearance, strengths and weaknesses. (e.g. absorbent, flexible, transparent).
Running-stitch	A simple style of sewing in a straight line with no overlapping.
Seam	A line along the two edges of cloth that are joined or sewn together.
Sew	To join or fasten by stitches with thread and a needle.
Shape	The form of an object.
Target audience	A particular group of people who the product is aimed at.
Target customer	A particular type of person who the product is aimed at.
Template	A stencil made of metal, plastic, or paper, used for making many copies of a shape or to help cut material accurately. (e.g. biscuit cutter)
Thread	A thin string of cotton, wool or silk used when sewing.
Unique	One of a kind, original.
Waistcoat	A formal vest-type jacket with no arms, usually worn over a shirt and under a jacket. They sometimes have buttons or pocket detailing.
Waterproof	Material that does not allow water pass through it.

DT Focus Weeks

DT Focus Weeks 2021/2022 (Example)

Autumn 1	Term Starts 02/09	06/09	13/09	20/09	27/09	04/10	11/10	18/10
				Year 5 Cooking & Nutrition		Year 1 Cooking & Nutrition		Year 2 Cooking & Nutrition
Autumn 2	01/11	08/11	15/11	22/11	29/11	06/12	13/12	
		Year 3 Cooking & Nutrition		Year 4 Cooking & Nutrition		Year 6 Cooking & Nutrition		
Spring 1	03/01	10/01	17/01	24/01	31/01	07/02	14/02	
			Year 5 Textiles		Year 1 Textiles		Year 2 Textiles	
Spring 2	28/02	07/03	14/03	21/03	28/03	04/04		
		Year 3 Textiles		Year 4 Textiles		Year 6 Textiles		
Summer 1	25/04	02/05	09/05	16/05	23/05			
		Year 5 Structures & Mechanisms		Year 1 Structures & Mechanisms	Year 2 Structures & Mechanisms			
Summer 2	06/06	13/06	20/06	27/06	04/07	11/07	18/07	
		Year 3 Structures & Mechanisms		Year 4 Structures & Mechanisms		Year 6 Structures & Mechanisms		

Cooking & Nutrition Textiles Structures & Mechanisms

EYFS

Characteristics of Effective Learning

Playing & Exploring:

- Showing curiosity about objects, events & people
- Pretending objects are things from their experiences
- Taking risks, engaging in new experiences, and learning by trial and error

Active Learning:

- Pay attention to details
- Persist with an activity or toward their goal when challenges occur
- Showing belief that more effort or different approach will pay off, and their skills can grow & develop
- Showing satisfaction in meeting their own goals
- Being proud of how they accomplished something

Thinking Creatively & Critically:

- Thinking of new and meaningful ideas
- Playing with possibilities (What if? What else?)
- Visualising and imagining options
- Finding new ways to do things
- Making links and noticing patterns in their experiences
- Testing ideas
- Developing ideas of sequences, cause and effect
- Planning, making decisions about how to approach a task, solve a problem and reach a goal
- Checking how well their activities are going

- Flexibly changing strategy if needed
- Reviewing how well the approach worked

Statutory ELG: Creating with Materials

Children at the expected level of development will:

- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function;
- Share their creations, explaining the process they have used;
- Make use of props and materials when role playing characters in narratives and stories.

Expressive Arts & Design – Development Matters Statements

	Creating with Materials:	Being Creative & Expressive:
Range 3:	• Continues to explore and experiment with an increasing range of media and movement through multi-sensory exploration and expression • Notices and becomes interested in the transformative effect of their actions on materials and resources • Become familiar with the properties and characteristics of materials and tools	• Pretends that one object represents another, especially when objects have characteristics in common • Creates sound effect and movements
Range 4:	• Experiments with ways to enclose a space, create shapes and represent actions, sound and objects • Uses 3D and 2D structures to explore materials and/or to express ideas • Gain confidence with interactions with tools and materials	• Uses everyday materials to explore, understand and represent their world, their ideas, interests and fascinations
Range 5:	• Develops an understanding of using lines to enclose a space, and begins to use drawing to represent actions and objects based on imagination, observation and experience • Uses various construction materials, e.g., joining pieces, stacking vertically and horizontally, balancing, making enclosures and creating spaces • Uses tools for a purpose • Think about what they want to create, the [process that may be involved and the materials and resources they might need • Notice changes in properties of media as they are transformed and talk about what is happening, thinking about cause and effect	• Respond to stories and represent their ideas of what they hear, imagine and enjoy through a variety of art forms and materials • Uses available resources to create props or creates imaginary ones to support play • Uses a wide variety of materials and resources, both inside and outside, that stimulate their imagination to build, to become, to represent and experiment with their imaginative play and thinking
Range 6:	• Uses their increasing knowledge and understanding of tools and materials to explore their interests and enquiries and develop their thinking • Develops their own ideas through experimentation with diverse materials, e.g., light projected image, loose parts, watercolours, powder paint, to express and communicate their discoveries and understanding • Choose a range materials, tools and techniques to experiment with colour, design, texture, form and function	• Creates representation of both imaginary and real-life ideas, events, people and objects • Uses combinations of art forms, e.g., moving and singing, making and dramatic play, drawing and talking, constructing and mapping • Responds imaginatively to art works and objects, e.g., this music sounds like dinosaurs, that sculpture is squishy, that peg looks like a mouth