



**Tudor Grange
Academies Trust**



Primary Design and Technology Curriculum Map

TGPASJ



Design and Technology Curriculum Map



Year 1

National Curriculum

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.

Cooking and Nutrition:

- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from.

Year 1	Autumn Term	Spring Term	Summer Term
Kapow Unit	Mechanisms: Moving Story Book	Textiles: Puppets	Cooking and Nutrition: Smoothies
Design Knowledge	Explaining how to adapt mechanisms, using bridges or guides to control the movement. Designing a moving story book for a given audience.	Using a template to create a design for a puppet.	Designing smoothie carton packaging by-hand.
Construction Knowledge	Following a design to create moving models that use levers and sliders.	Cutting fabric neatly with scissors. Using joining methods to decorate a puppet.	Chopping fruit and vegetables safely to make a smoothie.



Design and Technology Curriculum Map



		Sequencing steps for construction.	Juicing fruits safely to make a smoothie
Evaluation Knowledge	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.	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. Comparing their own smoothie with someone else's.
Technical Knowledge	To know that a mechanism is the parts of an object that move together. To know that a slider mechanism moves an object from side to side. To know that a slider mechanism has a slider, slots, guides and an object. To know that bridges and guides are bits of card that purposefully restrict the movement of the slider.	Using a template to create a design for a puppet.	Designing smoothie carton packaging by-hand.
Background Knowledge	To know that in Design and technology we call a plan a 'design'.	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. Juicing fruits safely to make a smoothie



Design and Technology Curriculum Map



Vocabulary	Assemble Design Evaluation Mechanism Model Sliders Stencil Target audience Template Test	Decorate Design Fabric Glue Model Hand puppet Safety pin Staple Stencil Template	Blender Fruit Healthy Ingredients Recipe Smoothie Vegetable Seed Root Leaf Stem Flavour Design Cut Juice	Table knife Juicer Plant Bush Tree Vine Chopping board Fork Taste Select Blend Evaluate Compare
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Design and Technology Curriculum Map



Year 2

National Curriculum

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.

Cooking and Nutrition:

- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from.

Year 2

Autumn Term

Spring Term

Summer Term

Kapow Unit

Mechanisms: Wheels and Axles

Cooking and Nutrition: Balanced Diet

Structures: Constructing a Castle

Design Knowledge

Designing a vehicle that includes wheels, axles and axle holders, that when combined, will allow the wheels to move.

Creating clearly labelled drawings that illustrate movement.

Designing three wrap ideas based on a food combination which work well together.

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 needed and colours.



Design and Technology Curriculum Map



			Designing and/or decorating a castle tower on CAD software.
Construction Knowledge	Adapting mechanisms, when: • they do not work as they should. • to fit their vehicle design. • to improve how they work after testing their vehicle.	Chopping foods safely to make a wrap. Constructing a wrap that meets a design brief. Grating foods to make a wrap. Snipping smaller foods instead of cutting.	Constructing a range of 3D geometric shapes using nets. Creating special features for individual designs. Making facades from a range of recycled materials.
Evaluation Knowledge	Testing wheel and axle mechanisms, identifying what stops the wheels from turning, and recognising that a wheel needs an axle in order to move.	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 food by giving a score.	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.
Technical Knowledge	To know that wheels need to be round to rotate and move. To understand that for a wheel to move it must be attached to a rotating axle. To know that an axle moves within an axle holder which is fixed to the vehicle or toy. To know that the frame of a vehicle (chassis) needs to be balanced.		To understand that wide and flat based objects are more stable. To understand the importance of strength and stiffness in structures.
Background Knowledge	To know some real-life items that use wheels such as wheelbarrows, hamster wheels and vehicles.	To know that 'diet' means the food and drink that a person or animal usually eats. To understand what makes a balanced diet.	To know the following features of a castle: flags, towers, battlements, turrets, curtain walls, moat, drawbridge and gatehouse - and their purpose. To know that a façade is the front of a structure.



Design and Technology Curriculum Map



		To know that the five main food groups are: Carbohydrates, fruits and vegetables, protein, dairy and foods high in fat and sugar. To understand that I should eat a range of different foods from each food group, and roughly how much of each food group. To know that 'ingredients' means the items in a mixture or recipe.	To understand that a castle needed to be strong and stable to withstand enemy attack. To know that a paper net is a flat 2D shape that can become a 3D shape once assembled. To know that a design specification is a list of success criteria for a product.
Vocabulary	Axle Axle holder Better Careful Choose Compare Design Dislike Like Mechanism Movement Product Straight line Tool Turn User Wheel Worse	Appearance Balanced Carbohydrates Combination Dairy Design Design brief Diet Feel Grate Grater Menu Oils Prepare Proteins Review Scissors Smell Snip Spread Spreads	2D shapes 3D shapes Castle Design criteria Evaluate Facade Feature Flag Net Recyclable Scoring Stable Strong Structure Tab Weak



Design and Technology Curriculum Map



Year 3

National Curriculum

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]

Cooking and Nutrition

- 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

Year 3

Autumn Term

Spring Term

Summer Term

Kapow Unit

Mechanical Systems: Pneumatic Toys

Cooking and Nutrition: Adapting a Recipe

Textiles: Egyptian Collars

Design Knowledge

Designing a toy which uses a pneumatic system.
Developing design criteria from a design brief.

Designing a biscuit within a given budget, drawing upon previous taste testing judgements.

Designing and making a template from an existing cushion and applying individual design criteria.



Design and Technology Curriculum Map



	Generating ideas using thumbnail sketches and exploded diagrams. Learning that different types of drawings are used in design to explain ideas clearly.	Designing packaging for a biscuit that targets a specific group.	
Construction Knowledge	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 and weaving.	Following a baking recipe, including the preparation of ingredients. Cooking safely, following basic hygiene rules. Adapting a recipe to meet the requirements of a target audience. Using a cuboid net to create packaging.	Following design criteria to create an Egyptian collar. Selecting and cutting fabrics with ease using fabric scissors. Threading needles with greater independence. Tying knots with greater independence. Sewing cross stitch to join fabric. Decorating fabric using appliqué. Completing by embellishing the collars based on design ideas.
Evaluation Knowledge	Using the views of others to improve designs. Testing and modifying the outcome, suggesting improvements. Understanding the purpose of exploded-diagrams through the eyes of a designer and their client.	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 food products. Suggesting modifications to a recipe (e.g. This biscuit has too many raisins, and it is falling apart, so next time I will use less raisins).	Evaluating an end product and thinking of other ways in which to create similar items.
Technical Knowledge	To understand how pneumatic systems work. To understand that pneumatic systems can be used as part of a mechanism.		To know that applique is a way of mending or decorating a textile by applying smaller pieces of fabric to larger pieces.



Design and Technology Curriculum Map



	To know that pneumatic systems operate by drawing in, releasing and compressing air.		To know that when two edges of fabric have been joined together it is called a seam. To know that it is important to leave space on the fabric for the seam. To understand that some products are turned inside out after sewing so the stitching is hidden.
Background Knowledge	To understand how sketches, drawings and diagrams can be used to communicate design ideas. To know that exploded-diagrams are used to show how different parts of a product fit together. To know that thumbnail sketches are small drawings to get ideas down on paper quickly.	To know that the amount of an ingredient in a recipe is known as the 'quantity.' To know that safety and hygiene are important when cooking. To know the following cooking techniques: sieving, measuring, stirring, cutting out and shaping. To understand the importance of budgeting while planning ingredients for biscuits. To know that products often have a target audience.	
Vocabulary	Exploded-diagram Function Input Lever Linkage Mechanism Motion Net Output Pivot Pneumatic system Thumbnail sketch	Adapt Addition Budget Buttery Combine Comment Construct Cream Crunchy Cuboid Fold Hygiene Layout	Market research Modify Multiplication Opinion Pounds Sieve Sift Target audience Texture Unique Wooden spoon
			Accurate Applique Cross-stitch Cushion Decorate Detail Fabric Patch Running-stitch Seam Stencil Stuffing Target audience Target customer Template



Design and Technology Curriculum Map



Year 4

National Curriculum

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

Year 4

Autumn Term

Spring Term

Summer Term

Kapow Unit

Electrical Systems: Electric Poster

Structure: Pavilions

Digital World: Wearable Technology

Design Knowledge

Carry out research based on a given topic to develop a range of initial ideas.

Designing a stable pavilion structure that is aesthetically pleasing and selecting materials to create a desired effect.

Problem solving by suggesting which features on a Micro:bit might be useful and justifying my ideas.



Design and Technology Curriculum Map



	Generate a final design for the electric poster with consideration to the client's needs and design criteria. Design an electric poster that fits the requirements of a given brief. Plan the positioning of the bulb (circuit component) and its purpose.	Building frame structures designed to support weight.	Drawing and manipulating 2D shapes, using computer-aided design, to produce a point of sale badge. Developing design ideas through annotated sketches to create a product concept. Developing design criteria to respond to a design brief.
Construction Knowledge	Create a final design for the electric poster. Mount the poster onto corrugated card to improve its strength and allow it to withstand the weight of the circuit on the rear. Measure and mark materials out using a template or ruler. Fit an electrical component (bulb). Learn ways to give the final product a higher quality finish (e.g. framing to conceal a roughly cut edge).	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 cladding. Reinforcing corners to strengthen a structure. Creating a design in accordance with a plan. Learning to create different textural effects with materials.	Following a list of design requirements. Writing a program to control (button press) and/or monitor (sense light) that will initiate a flashing LED algorithm.
Evaluation Knowledge	Learning to give and accept constructive criticism on own work and the work of others. Testing the success of initial ideas against the design criteria and justifying opinions. Revisiting the requirements of the client to review developing design ideas and check that they fulfil their needs.	Evaluating structures made by the class. Describing what characteristics of a design and construction made it the most effective. Considering effective and ineffective designs.	Analysing and evaluating wearable technology. Using feedback from peers to improve design.
Technical Knowledge	To understand that an electrical system is a group of parts (components) that work together to transport electricity around a circuit.	To understand what a frame structure is.	To understand that, in programming, a 'loop' is code that repeats something again and again until stopped.



Design and Technology Curriculum Map



	To understand common features of an electric product (switch, battery or plug, dials, buttons etc.). To list examples of common electric products (kettle, remote control etc.). To understand that an electric product uses an electrical system to work (function). To know the name and appearance of a bulb, battery, battery holder and crocodile wire to build simple circuits.		To know that a 'free-standing' structure is one which can stand on its own.		To know that a Micro:bit is a pocket-sized, codeable computer. To know that a simulator is able to replicate the functions of an existing piece of technology.	
Background Knowledge	To understand the importance and purpose of information design. To understand how material choices (such as mounting paper to corrugated card) can improve a product to serve its purpose (remain rigid without bending when the electrical circuit is attached).		To know that a pavilion is a decorative building or structure for leisure activities. To know that cladding can be applied to structures for different effects. To know that aesthetics are how a product looks. To know that a product's function means its purpose. To understand that the target audience means the person or group of people a product is designed for. To know that architects consider light, shadow and patterns when designing.		To know what the 'Digital Revolution' is and features of some of the products that have evolved as a result. To understand what is meant by 'point of sale display.' To know that CAD stands for 'Computer-aided design'. To know what a focus group is by taking part in one.	
Vocabulary	Battery Bulb Circuit Circuit component Crocodile wires Electrical product Electrical system	Final design Information design Initial ideas Peer assessment Research Self assessment Sketch	Aesthetic Cladding Design criteria Evaluation Frame structure Function Inspiration	Reinforce Stable Structure Target audience Target customer Texture Theme	Analogue Analyse Annotate Badge CAD Control Design criteria	Function Initiate Layers Loops Micro:bit Monitor Net



Design and Technology Curriculum Map



		Pavilion	Develop Digital Digital revolution Digital world Display Electronic Fastening Feature Feedback Form	Point of sale Product Product concept Program Sense Simulator Smart Technology Test User
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Design and Technology Curriculum Map



Year 5

National Curriculum

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

Year 5

Autumn Term

Spring Term

Summer Term

Kapow Unit

Structure: Bridges

Mechanical Systems: Automata Toys

Digital World: Monitoring Devices

Design Knowledge

Designing a stable structure that is able to support weight.

Creating a frame structure with a focus on triangulation.

Experimenting with a range of cams, creating a design for an automata toy based on a choice of cam to create a desired movement.

Researching (books, internet) for a particular (user's) animal's needs.

Developing design criteria based on research.



Design and Technology Curriculum Map



		Understanding how linkages change the direction of a force. Making things move at the same time. Understanding and drawing cross-sectional diagrams to show the inner-workings of my design.	Generating multiple housing ideas using building bricks. Understanding what a virtual model is and the pros and cons of traditional and CAD modelling. Placing and manoeuvring 3D objects, using CAD. Changing the properties of, or combining one or more 3D objects, using CAD.
Construction Knowledge	Making a range of different shaped beam bridges. Using triangles to create truss bridges that span a given distance and support 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. Explaining why selecting appropriating materials is an important part of the design process. Understanding basic wood functional properties.	Measuring, marking and checking the accuracy of the jelutong and dowel pieces required. 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.	Understanding the functional and aesthetic properties of plastics. Programming to monitor the ambient temperature and coding an (audible or visual) alert when the temperature rises above or falls below a specified range.
Evaluation Knowledge	Adapting and improving own bridge structure by identifying points of weakness and reinforcing them as necessary.	Evaluating the work of others and receiving feedback on own work. Applying points of improvement to their toys.	Stating an event or fact from the last 100 years of plastic history.



Design and Technology Curriculum Map



	Suggesting points for improvements for own bridges and those designed by others.		Describing changes they would make/do if they were to do the project again.		Explaining how plastic is affecting planet Earth and suggesting ways to make more sustainable choices. Explaining key functions in my program (audible alert, visuals). Explaining how my product would be useful for an animal carer including programmed features.	
Technical Knowledge	To understand some different ways to reinforce structures.		To understand that the mechanism in an automata uses a system of cams, axles and followers.		To know that a ‘device’ means equipment created for a certain purpose or job and that monitoring devices observe and record.	
	To understand how triangles can be used to reinforce bridges.		To understand that different shaped cams produce different outputs.		To know that a sensor is a tool or device that is designed to monitor, detect and respond to changes for a purpose.	
	To know that properties are words that describe the form and function of materials. • To understand why material selection is important based on properties.				To understand that conditional statements in programming are a set of rules which are followed if certain conditions are met.	
	To understand the material (functional and aesthetic) properties of wood.					
Background Knowledge	To understand the difference between arch, beam, truss and suspension bridges.		To know that an automata is a hand powered mechanical toy.		To understand key developments in thermometer history.	
	To understand how to carry and use a saw safely.		To know that a cross-sectional diagram shows the inner workings of a product.		To know events or facts that took place over the last 100 years in the history of plastic, and how this is changing our outlook on the future.	
			To understand how to use a bench hook and saw safely.		To know the 6Rs of sustainability.	
			To know that a set square can be used to help mark 90° angles		To understand what a virtual model is and the pros and cons of traditional vs CAD modelling.	
Vocabulary	Abutment Accurate Arched bridge Beam bridge	Predict Reinforce Research Sandpaper	Accurate Automata Axle Bench hook	Evaluate Exploded-diagram Follower Form	Alert Ambient Boolean Consumables	Moulded Plastic Plastic pollution Programming comment



Design and Technology Curriculum Map



	Coping saw Evaluation File Mark out Material properties Measure	Set square Suspension bridge Tenon saw Test Truss bridge Wood	Cam Cam profile Component Cross-sectional diagram Diagram Dowel	Frame Function Housing Mechanism Storefront Visual	Decompose Development Device Duplicate Durable Electronic Inventor Lightweight Man-made Manipulate Manoeuvre Microplastics Model Monitor Monitoring device	Programming loop Reformed Replica Research Sensor Strong Sustainability Synthetic Thermometer Thermoscope Value Variable Versatile Water-resistant Workplane
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Design and Technology Curriculum Map



Year 6

National Curriculum

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

Cooking and Nutrition

- 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.

Year 6

Autumn Term

Spring Term

Summer Term

Kapow Unit

Cooking and Nutrition: Eating Seasonally

Textiles: Stuffed Toys

Electrical Systems: Steady Hand Game



Design and Technology Curriculum Map



Design Knowledge	Designing a recipe for a savoury tart.	Designing a stuffed toy, considering the main component shapes required and creating an appropriate template. Considering the proportions of individual components.	Designing a steady hand game - identifying and naming the components required. Drawing a design from three different perspectives. Generating ideas through sketching and discussion. Modelling ideas through prototypes. Understanding the purpose of products (toys), including what is meant by 'fit for purpose' and 'form over function'.
Construction Knowledge	Following the instructions within a recipe. Tasting seasonal ingredients. Selecting seasonal ingredients. Peeling ingredients safely. Cutting safely with a vegetable knife.	Creating a 3D stuffed toy from a 2D design. Measuring, marking and cutting fabric accurately and independently. Creating strong and secure blanket stitches when joining fabric. Threading needles independently. Using appliqué to attach pieces of fabric decoration. Sewing blanket stitch to join fabric. Applying blanket stitch so the spaces between the stitches are even and regular.	Constructing a stable base for a game. Accurately cutting, folding and assembling a net. Decorating the base of the game to a high-quality finish. Making and testing a circuit. Incorporating a circuit into a base.
Evaluation Knowledge	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.	Testing and evaluating an end product and giving point for further improvements.	Testing own and others finished games, identifying what went well and making suggestions for improvement. Gathering images and information about existing children's toys.



Design and Technology Curriculum Map



	Suggesting points for improvement when making a seasonal tart.		Analysing a selection of existing children's toys.
Technical Knowledge		To know that blanket stitch is useful to reinforce the edges of a fabric material or join two pieces of fabric. To understand that it is easier to finish simpler designs to a high standard. To know that soft toys are often made by creating appendages separately and then attaching them to the main body. To know that small, neat stitches which are pulled taut are important to ensure that the soft toy is strong and holds the stuffing securely.	To know that batteries contain acid, which can be dangerous if they leak. To know the names of the components in a basic series circuit, including a buzzer.
Background Knowledge	To know that not all fruits and vegetables can be grown in the UK. To know that climate affects food growth. To know that vegetables and fruit grow in certain seasons. To know that cooking instructions are known as a 'recipe'. To know that imported food is food which has been brought into the country. To know that exported food is food which has been sent to another country.		To know that 'form' means the shape and appearance of an object. To know the difference between 'form' and 'function'. To understand that 'fit for purpose' means that a product works how it should and is easy to use. To know that form over purpose means that a product looks good but does not work very well. To know the importance of 'form follows function' when designing: the product must be designed primarily with the function in mind. To understand the diagram perspectives 'top view', 'side view' and 'back'.



Design and Technology Curriculum Map



	To know that eating seasonal foods can have a positive impact on the environment.					
	To know that similar coloured fruits and vegetables often have similar nutritional benefits.					
	To know that the appearance of food is as important as taste.					
Vocabulary	Arid Climate Complementary Country Export Import Mediterranean Mock-up Mountain	Peel Polar Seasonal Seasons Snip Temperate Texture Tropical Weather	Accurate Annotate Appendage Blanket-stitch Design criteria Detail Evaluation	Fabric Sew Shape Stuffed toy Stuffing Template	Assemble Battery Battery pack Benefit Bulb Bulb holder Buzzer Circuit Circuit symbol Component Conductor Copper Design	Design criteria Evaluation Fine motor skills Fit for purpose Form Function Gross motor skills Insulator LED User