



DT Curriculum

DT Overview

	Term		
Yellow Class	Spring 1	Spring 2	Summer 2
	Use of Materials/Mechanisms 	Textiles 	Cooking and Nutrition 
Green Class	Autumn 1	Spring 1	Summer 2
	Textiles 	Cooking and Nutrition 	Use of Materials/Mechanisms 

DT Overview

	Term		
Blue Class	Autumn 2	Spring 1	Spring 2
	Mechanisms 	Cooking and Nutrition 	Textiles 
Orange Class	Autumn 1	Spring 2	Summer 1
	Textiles 	Stiff and Flexible Materials/Electrical Components 	Cooking and Nutrition 

DT Overview

	Term		
Lime Class	Autumn 1	Summer 1	Summer 2
	Electrical and Mechanical Components 	Cooking and Nutrition 	Textiles 
Lilac Class	Spring 1	Summer 1	Summer 2
	Textiles 	Cooking and Nutrition 	Use of Materials/Electrical and Mechanical 

DT Overview

	Term		
	Spring 1	Spring 2	Summer 2
Turquoise Class	<p>Textiles</p> 	<p>Cooking and Nutrition</p>  <p>MAKING BREAD RECIPE Kids in the Kitchen</p>	<p>Use of Materials/Electrical and Mechanical</p> 
Purple Class	<p>Autumn 1</p> <p>Textiles</p> 	<p>Summer</p> <p>Use of Materials/Electrical and Mechanical</p> 	

Yellow Class

Key Knowledge, Skills and Understanding

Design	Make
<p><u>Reception Expectations:</u> They represent their own ideas, thoughts and feelings through design and technology.</p> <p><u>Year 1 Expectations:</u> Children know how to create some ideas of their own and suggest what they are going to do. Children know how to use pictures and words to plan and design. Children know how to design a product for themselves and a target group following design criteria. Children know the development of existing products: What they are for, how they work, materials used. Children know how to make templates and prototypes of their ideas in card and paper or using ICT.</p>	<p><u>Reception Expectations:</u> Constructs with a purpose in mind, using a variety of resources. Uses simple tools and techniques competently and appropriately. Selects appropriate resources and adapts work where necessary. Selects tools and techniques needed to shape, assemble and join materials they are using. They use and explore a variety of materials, tools and techniques.</p> <p><u>Year 1 Expectations:</u> Children know how to select the right tools and equipment to cut, shape, join and finish. Exploring using tools such as scissors and a hole punch safely. Children know how to make their design using appropriate techniques. Children know how to build structures, exploring how they can be made stronger, stiffer and more stable. Children know and use mechanisms [for example, levers, sliders, wheels and axles], in their products. With help, children know how to measure, mark out, cut and shape a range of materials. Children know how to assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape. Children know how to use simple finishing techniques to improve the appearance of their product. Children know how to use levers or slides in their work.</p>
Evaluate	
<p><u>Year 1 Expectations:</u> Children know how to talk about existing products and say what is good and not so good about them. Children know how to evaluate their product by discussing how well it works in relation to the purpose (design criteria). Children begin to evaluate their products as they are developed, identifying strengths and possible changes they might make.</p>	

Yellow Class

Key Knowledge, Skills and Understanding

Cooking and Nutrition (to also include design, make, evaluate)

Year 1 Expectations:

Children know that all food comes from plants or animals.

Children know that food has to be farmed, grown elsewhere (e.g. home) or caught.

Children know how to name and sort foods into the five groups.

Children know that everyone should eat at least five portions of fruit and vegetables every day.

Children know how to prepare simple dishes safely and hygienically, without using a heat source.

Children know how to use techniques such as cutting, peeling and grating safely.

Children know how to cut food safely.

Children know how to describe the texture of foods.

Children know how to wash their hands and make sure that surfaces are clean.

Yellow Class - Spring 1

Overview	Final Outcome	Suggested Sequence
<p>Use of Materials/ Mechanisms</p> 	<p>Pop Up/Moving Thank You Cards</p>	<ol style="list-style-type: none"> 1. Children research a variety of cards and discuss their purpose. Also look at pop up cards and explore their function. 2. Children design their own card for a specific audience. 3. Children experiment with a range of joining techniques. 4. Children make their cards using joining techniques taught. 5. Children complete their cards. 6. Children evaluate the effectiveness of their cards and suggest changes.
Key Vocabulary		Resources
<p>Cut, join, attach, move, pop-up, planning, investigating design, evaluate, make, user, purpose, ideas, product, slider, lever, pivot, slot, bridge/guide, card, masking tape, paper fastener, join, pull, push, up, down, straight, curve, forwards, backwards</p>		<p>A range of card, glue, scissors, ruler, masking tape</p>

Yellow Class - Spring 2

Overview	Final Outcome	Suggested Sequence
<p>Textiles</p> 	<p>Teddies and Toys</p>	<ol style="list-style-type: none"> 1. Children to research range of fabric toys and teddies from the past including properties and materials. 2. Children learn about and practise joining techniques. Children explore a range of materials. 3. Children design their toy or teddy and continue to practise joining techniques. 4. Children begin to make their toy or teddy. 5. Children complete their toy or teddy. 6. Children evaluate and make suggested changes to their product.
Key Vocabulary		Resources
<p>joining and finishing techniques, tools, fabrics and components, template, pattern pieces, mark out, join, decorate, finish, planning, investigating design, evaluate, make, user, purpose, ideas, product,</p>		<p>Felt, scissors, needles, thread, hole punch, buttons, beads, glue</p>

Yellow Class - Summer 2

Overview	Final Outcome	Suggested Sequence
<p style="text-align: center;">Cooking and Nutrition</p> 	<p>Afternoon Tea for the Queen</p>	<ol style="list-style-type: none"> 1. Children to research afternoon tea ideas and the Queen's preferences. 2. Children to experiment with sandwich fillings and accompaniments, tasting and discussing. 3. Children to design afternoon tea sandwiches for the queen. 4. Children to make afternoon tea for the Queen. 5. Children to evaluate their own and others afternoon tea. 6. Children to remake and hold an afternoon tea for parents.
Key Vocabulary	Resources	
<p>planning, investigating design, evaluate, make, user, purpose, ideas, product, fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients,</p>	<p>Range of savoury and sweet foods e.g. breads, fillings etc, knife (safe), chopping board, soap and water</p>	

Green Class

Key Knowledge, Skills and Understanding

Design	Make	Evaluate
<p><u>Year 1 Expectations:</u></p> <p>Children know how to create some ideas of their own and suggest what they are going to do.</p> <p>Children know how to use pictures and words to plan and design.</p> <p>Children know how to design a product for themselves and a target group following design criteria.</p> <p>Children know the development of existing products: What they are for, how they work, materials used.</p> <p>Children know how to make templates and prototypes of their ideas in card and paper or using ICT.</p> <p><u>Year 2 Expectations:</u></p> <p>Children know how to plan to use the best tools and materials and explain their reasoning.</p> <p>Children know how to describe their design by using pictures, diagrams, prototypes, words and ICT.</p> <p>Children know how to identify a target group for what they intend to design and make based on a design criteria.</p> <p>Children know how to share their ideas through talk and drawings and label parts.</p> <p>Children know how to generate ideas by drawing on their own and other people's experiences.</p> <p>Children know how to develop their design ideas through discussion, observation, drawing and modelling. Identify a purpose for what they intend to design and make.</p>	<p><u>Year 1 Expectations:</u></p> <p>Children know how to select the right tools and equipment to cut, shape, join and finish.</p> <p>Exploring using tools such as scissors and a hole punch safely.</p> <p>Children know how to make their design using appropriate techniques.</p> <p>Children know how to build structures, exploring how they can be made stronger, stiffer and more stable.</p> <p>Children know and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</p> <p>With help, children know how to measure, mark out, cut and shape a range of materials.</p> <p>Children know how to assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape.</p> <p>Children know how to use simple finishing techniques to improve the appearance of their product.</p> <p>Children know how to use levers or slides in their work.</p> <p><u>Year 2 Expectations:</u></p> <p>Children know how to select tools and materials depending on their characteristics ; using the correct vocabulary to name and describe them.</p> <p>Children know how to build secure structures, exploring how they can be made stronger, stiffer and more stable.</p> <p>Children know how measure, cut and score with some accuracy.</p> <p>Children know how to use hand tools safely and appropriately.</p> <p>Children know how to assemble, join and combine materials in order to make a product.</p> <p>Children know how to cut, shape and join fabric to make a simple product.</p> <p>Children know how to use basic sewing techniques.</p> <p>Children know how to use axels and wheels in their work.</p>	<p><u>Year 1 Expectations:</u></p> <p>Children know how to talk about existing products and say what is good and not so good about them.</p> <p>Children know how to evaluate their product by discussing how well it works in relation to the purpose (design criteria).</p> <p>Children begin to evaluate their products as they are developed, identifying strengths and possible changes they might make.</p> <p><u>Year 2 Expectations:</u></p> <p>Children know how to evaluate their work against their design criteria.</p> <p>Children know how to evaluate their products as they are developed, identifying strengths and possible changes they might make.</p> <p>Children know how to confidently talk and write about their ideas, saying what they like and dislike about them.</p>

Green Class

Key Knowledge, Skills and Understanding

Cooking and Nutrition (to also include design, make, evaluate)

Year 1&2 Expectations:

Children know that all food comes from plants or animals.

Children know that food has to be farmed, grown elsewhere (e.g. home) or caught.

Children know how to name and sort foods into the five groups.

Children know that everyone should eat at least five portions of fruit and vegetables every day.

Children know how to prepare simple dishes safely and hygienically, without using a heat source.

Children know how to use techniques such as cutting, peeling and grating safely.

Children know how to cut food safely.

Children know how to describe the texture of foods.

Children know how to wash their hands and make sure that surfaces are clean.

Children know how to think of interesting ways of decorating and presenting food they have made, eg, cakes.

Green Class - Autumn 1

Overview	Final Outcome	Suggested Sequence
<p>Textiles</p> 	<p>A tool bag for Izzy Gizmo</p>	<ol style="list-style-type: none"> 1. Children to explore a range of bags, satchels etc and look at how they have been designed and made. 2. Children to explore the suitability of a range of materials and learn joining techniques. 3. Children to continue to practise joining techniques. 4. Children to design a bag specifically for Izzy Gizmo. 5. Children to begin making the bag. 6. Children to complete making the bag and evaluate with suggested changes.
Key Vocabulary		Resources
<p>joining and finishing techniques, tools, fabrics and components, template, pattern pieces, mark out, join, decorate, finish, planning, investigating design, evaluate, make, user, purpose, ideas, product,</p>		<p>Range of fabrics, glue, scissors, rulers, needles, thread</p>

Green Class - Spring 1

Overview	Final Outcome	Suggested Sequence
<p>Cooking and Nutrition</p> 	<p>A healthy snack for Beegu</p>	<ol style="list-style-type: none"> 1. Children to research healthy snacks and fruits. 2. Children to explore fruits and taste test to discuss which would work well together. 3. Children to learn basic, safe, cutting, peeling and grating skills. 4. Children to design a fruit salad or kebab for Beegu. 5. Children to make their healthy snack for Beegu. 6. Children to evaluate each others and their own snacks and suggest changes.
Key Vocabulary		Resources
<p>planning, investigating design, evaluate, make, user, purpose, ideas, product, fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients,</p>		<p>Range of fruit, safe to use knives, graters, shopping boards, soap, water, kebab sticks</p>

Green Class - Summer 2

Overview	Final Outcome	Suggested Sequence
<p>Use of Materials/ Mechanisms</p> 	<p>The Naughty Bus</p>	<ol style="list-style-type: none"> 1. Children to research and explore moving vehicles and look at parts which make these move. 2. Children to explore wheels and axels and which materials would be suitable to make the body of the car with. 3. Children to design their own naughty bus, taking ideas from the text. 4. Children to begin to make the frame and body of their own push and pull bus. 5. Children to decorate their bus. 6. Children to evaluate their bus and the buses of others and make suggested changes.
Key Vocabulary		Resources
<p>vehicle, wheel, axle, axle holder, chassis, body, cab assembling, cutting, joining, shaping, finishing, fixed, free, moving, mechanism names of tools, equipment and materials used investigating, planning, design, make, evaluate, user, purpose, ideas, design criteria, product, function</p>		<p>Boxes, scissors, rulers, wooden dowels, wooden or plastic wheels, pencils, paint, paper or card for decorating, possibly hack saws</p>

Blue Class

Key Knowledge, Skills and Understanding

Design	Make	Evaluate
<p><u>Year 2 Expectations:</u></p> <p>Children know how to plan to use the best tools and materials and explain their reasoning.</p> <p>Children know how to describe their design by using pictures, diagrams, prototypes, words and ICT.</p> <p>Children know how to identify a target group for what they intend to design and make based on a design criteria.</p> <p>Children know how to share their ideas through talk and drawings and label parts.</p> <p>Children know how to generate ideas by drawing on their own and other people's experiences.</p> <p>Children know how to develop their design ideas through discussion, observation, drawing and modelling. Identify a purpose for what they intend to design and make.</p>	<p><u>Year 2 Expectations:</u></p> <p>Children know how to select tools and materials depending on their characteristics ; using the correct vocabulary to name and describe them.</p> <p>Children know how to build secure structures, exploring how they can be made stronger, stiffer and more stable.</p> <p>Children know how measure, cut and score with some accuracy.</p> <p>Children know how to use hand tools safely and appropriately.</p> <p>Children know how to assemble, join and combine materials in order to make a product.</p> <p>Children know how to cut, shape and join fabric to make a simple product.</p> <p>Children know how to use basic sewing techniques.</p> <p>Children know how to use axels and wheels in their work.</p>	<p><u>Year 2 Expectations:</u></p> <p>Children know how to evaluate their work against their design criteria.</p> <p>Children know how to evaluate their products as they are developed, identifying strengths and possible changes they might make.</p> <p>Children know how to confidently talk and write about their ideas, saying what they like and dislike about them.</p>

Blue Class

Key Knowledge, Skills and Understanding

Cooking and Nutrition (to also include design, make, evaluate)

Year 2 Expectations:

Children know that all food comes from plants or animals.

Children know that food has to be farmed, grown elsewhere (e.g. home) or caught.

Children know how to name and sort foods into the five groups.

Children know that everyone should eat at least five portions of fruit and vegetables every day.

Children know how to prepare simple dishes safely and hygienically, without using a heat source.

Children know how to use techniques such as cutting, peeling and grating safely.

Children know how to cut food safely.

Children know how to describe the texture of foods.

Children know how to wash their hands and make sure that surfaces are clean.

Children know how to think of interesting ways of decorating and presenting food they have made, eg, cakes.

Blue Class - Autumn 2

Overview	Final Outcome	Suggested Sequence
<p>Mechanisms</p> 	<p>Moving Rockets</p>	<ol style="list-style-type: none"> 1. Children to explore materials and their uses. 2. Children to explore making reels wind up using pulleys or making objects move with the turn of a wheel. 3. Children to design their own rockets and the back drop/box. 4. Children to begin to make their own moving rockets. 5. Children to complete their product. 6. Children to evaluate and make suggested changes.
Key Vocabulary		Resources
<p>investigating, planning, design, make, evaluate, user, purpose, ideas, design criteria, product, function, vehicle, wheel, axle, axle holder, chassis, body, cab assembling, cutting, joining, shaping, finishing, fixed, free, moving, mechanism names of tools, equipment and materials used</p>		<p>Cardboard boxes, wooden dowel, cotton reels, cotton/thread, paper, card, paint, different shaped wooden wheels, handles, possibly a manual drill</p>

Blue Class - Spring 1

Overview	Final Outcome	Suggested Sequence
<p>Cooking and Nutrition</p> 	<p>Packed Lunch for Traction Man</p>	<ol style="list-style-type: none"> 1. Children to research possible packed lunch contents and their nutritional values. 2. Children to think about the needs of Traction man as he is on his travels. 3. Children to experiment with tastes, flavours and combinations. 4. Children to design a packed lunch for Traction Man. 5. Children to make a packed lunch for Traction Man. 6. Children to evaluate and make suggested changes to their designs.
Key Vocabulary		Resources
<p>investigating, planning, design, make, evaluate, user, purpose, ideas, design criteria, product, function, fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients</p>		<p>Range of healthy ingredients to make a packed lunch for Traction Man, range of cleaning equipment, range of safe cutting tools etc</p>

Blue Class - Spring 2

Overview	Final Outcome	Suggested Sequence
<p data-bbox="264 379 398 416">Textiles</p> 	<p data-bbox="584 612 869 699">Seaside Puppet Show</p>	<ol data-bbox="929 379 2072 890" style="list-style-type: none"> 1. Children to research puppet show characters and how they are made. 2. Children to practise joining techniques and research/explore materials to make the puppets from. 3. Children to design their own puppet for a seaside show following a set criteria. 4. Children to begin making their puppets. 5. Children to complete their puppets. 6. Children to evaluate their puppets and those of others, making
Key Vocabulary		Resources
<p data-bbox="143 1038 898 1315">investigating, planning, design, make, evaluate, user, purpose, ideas, design criteria, product, function, joining and finishing techniques, tools, fabrics and components, template, pattern pieces, mark out, join, decorate, finish</p>		<p data-bbox="965 1187 2049 1262">Fabrics, buttons, beads, thread, needles, wooden dowel, materials for props, large boxes, scissors, glue, rulers, templates</p>

Orange Class

Key Knowledge, Skills and Understanding

Design	Make	Evaluate
<p><u>Year 3 Expectations:</u></p> <p>Children know how to show that their design meets a range of requirements and put together a plan which shows the order and also what equipment and tools they need.</p> <p>Children know how to describe their design using an accurately labelled sketch and words.</p> <p>With growing confidence, children know how to generate ideas for an item, considering its purpose and the user/s.</p> <p>Children are starting to order the main stages of making a product.</p> <p>Children know how to identify a purpose and establish criteria for a successful product.</p> <p>Children know and understand how well products have been designed, made, what materials have been used and the construction technique.</p> <p>Children know and start to understand whether products can be recycled or reused.</p> <p>Children know to explain their choice of materials and components including function and aesthetics.</p>	<p><u>Year 3 Expectations:</u></p> <p>Children know how to use equipment and tools accurately and safely.</p> <p>Children know how to stop and think about how good my product is going to end up.</p> <p>Children know how to select a wider range of tools and techniques for making their product i.e. construction materials and kits, textiles, food ingredients, mechanical components and electrical components.</p> <p>Children know how to explain their choice of tools and equipment in relation to the skills and techniques they will be using.</p> <p>Children know that mechanical and electrical systems have an input, process and output.</p> <p>Children know that mechanical systems such as levers and linkages or pneumatic systems create movement.</p> <p>Children know how simple electrical circuits and components can be used to create functional products.</p> <p>Children know how to measure, mark out, cut, score and assemble components with more accuracy.</p> <p>Children know how to think about their ideas as they make progress and be willing to change things if this helps them to improve their work.</p> <p>Children know how to measure, tape or pin, cut and join fabric with some accuracy.</p>	<p><u>Year 3 Expectations:</u></p> <p>Children know how to say what they would change which made their design even better.</p> <p>Children know how to practise their evaluation skills by evaluating existing products.</p> <p>Children know how to evaluate their product against original design criteria e.g. how well it meets its intended purpose</p> <p>Children know how to disassemble and evaluate familiar products and consider the views of others to improve them.</p>

Orange Class

Key Knowledge, Skills and Understanding

Cooking and Nutrition (to also include design, make, evaluate)

KS2 Expectations

Children know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world.

Children know and understand that seasons may affect the food available. Understand how food is processed into ingredients that can be eaten or used in cooking.

Children know and understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source.

Children know and understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.

Children know and understand that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eat well plate' Begin to know that to be active and healthy, food and drink are needed to provide energy for the body.

Children know and understand that different food and drink contain different substances – nutrients, water and fibre – that are needed for health.

Orange Class - Autumn 1

Overview	Final Outcome	Suggested Sequence
<p>Textiles</p> 	<p>A purse/wallet linked to Oliver Twist</p>	<ol style="list-style-type: none"> 1. Children to research and explore designs for Victorian purses and explore joining techniques in purses and pouches. 2. Children to practise joining techniques. 3. Children to continue practicing joining techniques and begin to design a money wallet for Oliver or a wallet/purse for a Victorian audience. 4. Children to begin to make their product. 5. Children to complete their product, adding finishes. 6. Children to evaluate their own and others' products against the
Key Vocabulary		Resources
<p>user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, function, planning, design criteria, annotated sketch, appealing, fabric, names of fabrics, fastening, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance</p>		<p>Fabric, needles, thread, scissors, ribbons, finishing products such as buttons etc, rulers</p>

Orange Class - Spring 2

Overview	Final Outcome	Suggested Sequence
<p>Stiff and Flexible Materials/Electrical Components</p> 	<p>Bridges of the UK</p>	<ol style="list-style-type: none"> 1. Research famous bridges of the UK and explore their structures (visit a bridge if possible). 2. Explore how to make structures stable using a range of stiff and flexible materials. 3. Explore a range of joining techniques which support the structure. 4. Children to design their own famous UK bridge, thinking about structure, support, design and functionality i.e. draw bridges. 5. Children begin to make their product. 6. Children complete their product, evaluating and making suggested changes.
Key Vocabulary		Resources
<p>user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, function, planning, design criteria, annotated sketch, appealing, shell structure, three-dimensional (3-D) shape, net, cube, cuboid, prism, vertex, edge, face, length, width, breadth, capacity, marking out, scoring, shaping, tabs, adhesives, joining, assemble, accuracy, material, stiff, strong, reduce, reuse, recycle, corrugating, ribbing, laminating,</p>		<p>Range of stiff and flexible materials to explore and use, rulers, scissors, masking tape, hacksaws, glue guns, protective equipment, string, pulleys and levers</p>

Orange Class - Summer 1

Overview	Final Outcome	Suggested Sequence
<p>Cooking and Nutrition</p> 	<p>Seasonal Salads</p>	<ol style="list-style-type: none"> 1. Children to research and explore seasons and the fruits and vegetables and learn about why some are available at certain times of the year. 2. Children to understand and learn about food groups and nutritional values. 3. Children to learn and practise safe: peeling, chopping, slicing and grating techniques. 4. Children design a salad to meet a set criteria i.e. nutritional value. 5. Children to make their own salads and taste those of others to evaluate and suggest changes.
Key Vocabulary		Resources
<p>user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, function, planning, design criteria, annotated sketch, appealing, name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet</p>		<p>Range of seasonal vegetables to create the salad, chopping boards, knives, graters, peelers, soap and water, bowls, cutlery</p>

Lime Class

Key Knowledge, Skills and Understanding

Design	Make	Evaluate
<p><u>Year 3 Expectations:</u></p> <p>Children know how to show that their design meets a range of requirements and put together a plan which shows the order and also what equipment and tools they need.</p> <p>Children know how to describe their design using an accurately labelled sketch and words.</p> <p>With growing confidence, children know how to generate ideas for an item, considering its purpose and the user/s.</p> <p>Children are starting to order the main stages of making a product.</p> <p>Children know how to identify a purpose and establish criteria for a successful product.</p> <p>Children know and understand how well products have been designed, made, what materials have been used and the construction technique.</p> <p>Children know and start to understand whether products can be recycled or reused.</p> <p>Children know to explain their choice of materials and components including function and aesthetics.</p>	<p><u>Year 3s Expectation:</u></p> <p>Children know how to use equipment and tools accurately and safely.</p> <p>Children know how to stop and think about how good my product is going to end up.</p> <p>Children know how to select a wider range of tools and techniques for making their product i.e. construction materials and kits, textiles, food ingredients, mechanical components and electrical components.</p> <p>Children know how to explain their choice of tools and equipment in relation to the skills and techniques they will be using.</p> <p>Children know that mechanical and electrical systems have an input, process and output.</p> <p>Children know that mechanical systems such as levers and linkages or pneumatic systems create movement.</p> <p>Children know how simple electrical circuits and components can be used to create functional products.</p> <p>Children know how to measure, mark out, cut, score and assemble components with more accuracy.</p> <p>Children know how to think about their ideas as they make progress and be willing to change things if this helps them to improve their work.</p> <p>Children know how to measure, tape or pin, cut and join fabric with some accuracy.</p>	<p><u>Year 3 Expectations:</u></p> <p>Children know how to say what they would change which made their design even better.</p> <p>Children know how to practise their evaluation skills by evaluating existing products.</p> <p>Children know how to evaluate their product against original design criteria e.g. how well it meets its intended purpose</p> <p>Children know how to disassemble and evaluate familiar products and consider the views of others to improve them.</p>

Lime Class

Key Knowledge, Skills and Understanding

Design	Make	Evaluate
<p><u>Year 4 Expectations:</u></p> <p>Children know how to start generating ideas, considering the purposes for which they are designing- link with Mathematics and Science.</p> <p>Children know how to put together a step-by-step plan which shows the order and also what equipment and tools they need.</p> <p>Children know how to describe their design, saying how realistic it is, using an accurately labelled sketch from different views showing specific features and words.</p> <p>Children know how to develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail.</p> <p>Children know, when planning, to consider the views of others, including intended users, to improve their work.</p>	<p><u>Year 4 Expectations:</u></p> <p>Children know how to select a wider range of tools and techniques for making their product safely.</p> <p>Children know how to measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques.</p> <p>Children know how to join and combine materials and components accurately in temporary and permanent ways.</p> <p>Children know how mechanical systems such as cams or pulleys or gears create movement.</p> <p>Children know and understand how more complex electrical circuits and components can be used to create functional products.</p> <p>Children know how to program a computer to monitor changes in the environment and control their products.</p> <p>Children know and understand how to reinforce and strengthen a 3D framework.</p> <p>Children know how to sew using a range of different stitches, to weave and knit.</p> <p>Children know how to measure, tape or pin, cut and join fabric with some accuracy.</p> <p>Children know how to use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT.</p>	<p><u>Year 4 Expectations:</u></p> <p>Children know how they will check if their design is successful.</p> <p>Children know how to evaluate their products carrying out appropriate tests.</p> <p>Children know how to evaluate their work both during and at the end of the assignment.</p> <p>Children know how to disassemble and evaluate familiar products and consider the views of others to improve them.</p>

Lime Class

Key Knowledge, Skills and Understanding

Cooking and Nutrition (to also include design, make, evaluate)

KS2 Expectations

Children know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world.

Children know and understand that seasons may affect the food available. Understand how food is processed into ingredients that can be eaten or used in cooking.

Children know and understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source.

Children know and understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.

Children know and understand that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eat well plate' Begin to know that to be active and healthy, food and drink are needed to provide energy for the body.

Children know and understand that different food and drink contain different substances – nutrients, water and fibre – that are needed for health.

Children know and understand how food is processed into ingredients that can be eaten or used in cooking.

Lime Class - Autumn 1

Overview	Final Outcome	Suggested Sequence
<p>Electrical and Mechanical Components</p> 	<p>A Torch for Orion</p>	<ol style="list-style-type: none"> 1. Children to dismantle torches and explore how they are designed, constructed and how they function. 2. Children to work with switches, conductors and reflective materials to test functionality. 3. Children to design their own torch for Orion. 4. Children to begin to make the circuit and the casing for the torch. 5. Children to add designs to the torch to make it suitable for the audience. 6. Children to test each others' torches in the dark and evaluate their functionality and design for Orion.
Key Vocabulary		Resources
<p>user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, function, planning, design criteria, annotated sketch, appealing, series circuit, fault, connection, toggle switch, push-to-make switch, push-to-break switch, battery, battery holder, bulb, bulb holder, wire, insulator, conductor, crocodile clip, control, program, system, input device, output device</p>		<p>Wires, cells, cell holders, bulbs, switches, reflective materials, card, masking tape, scissors, rulers, transparent materials, paint, drawing and designing materials</p>

Lime Class - Summer 1

Overview	Final Outcome	Suggested Sequence
<p>Cooking and Nutrition</p> 	<p>German Meal</p>	<ol style="list-style-type: none"> 1. Children research traditional German foods ensuring that stereotypes are not made. 2. Children taste a range of readily available traditional German foods and discuss flavours and which work well together. 3. Children to learn and practise safe: peeling, chopping, slicing and grating techniques. Also learn about food hygiene. 4. Children then design their own German dish follow a set criteria, thinking about the foods available and the nutritional values. 5. Children to make their German dishes, taste their own and others and evaluate against the criteria, suggesting changes they would make. 6. Children to write up evaluations with suggested changes.
Key Vocabulary		Resources
<p>user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, function, planning, design criteria, annotated sketch, appealing, name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet</p>		<p>Range of traditional German foods, knives, graters, peelers, chopping boards, bowls, plates, pans, oven, seasoning</p>

Lime Class - Summer 2

Overview	Final Outcome	Suggested Sequence
<p style="text-align: center;">Textiles</p> 	<p style="text-align: center;">Money Pouch for Robin Hood</p>	<ol style="list-style-type: none"> 1. Children to research and explore designs for purses/money bags and explore joining techniques in purses and pouches. 2. Children to practise joining techniques. 3. Children to continue practicing joining techniques and begin to design a money pouch for Robin Hood. 4. Children to begin to make their product. 5. Children to complete their product, adding finishes. 6. Children to evaluate their own and others' products against the criteria and suggest changes.
Key Vocabulary		Resources
<p>user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, function, planning, design criteria, annotated sketch, appealing, fabric, names of fabrics, fastening, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance</p>		<p style="text-align: center;">Fabric, needles, thread, scissors, ribbons, finishing products such as buttons etc, rulers</p>

Lilac Class

Key Knowledge, Skills and Understanding

Design	Make	Evaluate
<p><u>Year 4 Expectations:</u></p> <p>Children know how to start generating ideas, considering the purposes for which they are designing- link with Mathematics and Science.</p> <p>Children know how to put together a step-by-step plan which shows the order and also what equipment and tools they need.</p> <p>Children know how to describe their design, saying how realistic it is, using an accurately labelled sketch from different views showing specific features and words.</p> <p>Children know how to develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail.</p> <p>Children know, when planning, to consider the views of others, including intended users, to improve their work.</p>	<p><u>Year 4 Expectations:</u></p> <p>Children know how to select a wider range of tools and techniques for making their product safely.</p> <p>Children know how to measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques.</p> <p>Children know how to join and combine materials and components accurately in temporary and permanent ways.</p> <p>Children know how mechanical systems such as cams or pulleys or gears create movement.</p> <p>Children know and understand how more complex electrical circuits and components can be used to create functional products.</p> <p>Children know how to program a computer to monitor changes in the environment and control their products.</p> <p>Children know and understand how to reinforce and strengthen a 3D framework.</p> <p>Children know how to sew using a range of different stitches, to weave and knit.</p> <p>Children know how to measure, tape or pin, cut and join fabric with some accuracy.</p> <p>Children know how to use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT.</p>	<p><u>Year 4 Expectations:</u></p> <p>Children know how they will check if their design is successful.</p> <p>Children know how to evaluate their products carrying out appropriate tests.</p> <p>Children know how to evaluate their work both during and at the end of the assignment.</p> <p>Children know how to disassemble and evaluate familiar products and consider the views of others to improve them.</p>

Lilac Class

Key Knowledge, Skills and Understanding

Design	Make	Evaluate
<p><u>Year 5 Expectations:</u></p> <p>Can I suggest some improvements and say what was good and not so good about my original design?</p> <p>Children know how to generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces to suit their audience.</p> <p>Children know how to use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose.</p> <p>Children know, with confidence, how to apply a range of finishing techniques, including those from art and design.</p> <p>Children know how to draw up a specification for their design- link with Mathematics and Science.</p> <p>Children know how to use results of investigations, information sources, including ICT when developing design ideas.</p> <p>Children know, with confidence, how to select appropriate materials, tools and techniques.</p> <p>Children begin to understand how much products cost to make, how sustainable and innovative they are and the impact products have beyond their intended purpose.</p>	<p><u>Year 5 Expectations:</u></p> <p>Children know how to show a good level of expertise when using a range of tools and equipment.</p> <p>Children know how to select appropriate materials, tools and techniques e.g. cutting, shaping, joining and finishing, accurately.</p> <p>Children know how to 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.</p> <p>Children know and understand how mechanical systems such as cams or pulleys or gears create movement.</p> <p>Children know how more complex electrical circuits and components can be used to create functional products and how to program a computer to monitor changes in the environment and control their products.</p> <p>Children know and understand that mechanical and electrical systems have an input, process and output.</p> <p>Children know how to weigh and measure accurately (time, dry ingredients, liquids).</p> <p>Children know how to use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT.</p>	<p><u>Year 5 Expectations:</u></p> <p>Children know how to explain how they can improve their original design.</p> <p>Children know how to evaluate their product, thinking of both appearance and the way it works.</p> <p>Can I practise my evaluation skills by evaluating existing products against set criteria?</p> <p>Children know how to evaluate a product against the original design specification and by carrying out tests.</p> <p>Children know how to evaluate personally and seek evaluation from others.</p>

Lilac Class

Key Knowledge, Skills and Understanding

Cooking and Nutrition (to also include design, make, evaluate)

KS2 Expectations:

Children know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world.

Children know and understand that seasons may affect the food available. Understand how food is processed into ingredients that can be eaten or used in cooking.

Children know and understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source.

Children know and understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.

Children know and understand that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eat well plate' Begin to know that to be active and healthy, food and drink are needed to provide energy for the body.

Children know and understand that different food and drink contain different substances – nutrients, water and fibre – that are needed for health.

Children know and understand how food is processed into ingredients that can be eaten or used in cooking.

Lilac Class - Spring 1

Overview	Final Outcome	Suggested Sequence
<p>Textiles</p> 	<p>Saxon Weaving</p>	<ol style="list-style-type: none"> 1. Children to research Saxon weaving designs. 2. Children to practise weaving techniques. 3. Children to continue to practise weaving techniques and to design their own weave pattern and colour. 4. Children to produce their own weaves. 5. Children to evaluate their work and the work of other suggesting changes and adaptations needed. 6. Children to make any changes suggested to their product.
Key Vocabulary		Resources
<p>evaluating, design brief design criteria, innovative, prototype, user, purpose, function, prototype, design criteria, innovative, appealing, design brief, planning, annotated sketch, sensory evaluations, seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces, name of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings,</p>		<p>Wool of different colours, wood, scissors</p>

Lilac Class - Summer 1

Overview	Final Outcome	Suggested Sequence
<p>Cooking and Nutrition</p> 	<p>American Cuisine</p>	<ol style="list-style-type: none"> 1. Children research traditional American foods ensuring that stereotypes are not made. Look at the festivals and traditions too i.e. Thanks Giving 2. Children taste a range of readily available traditional American foods and discuss flavours and which work well together. 3. Children to learn and practise safe: peeling, chopping, slicing and grating techniques. Also learn about food hygiene. 4. Children then design their own American dish follow a set criteria, thinking about the foods available and the nutritional values. 5. Children to make their American dishes, taste their own and others and evaluate against the criteria, suggesting changes they would make. 6. Children to write up evaluations with suggested changes. <p>More ideas found at: https://www.planbee.com/american-food</p>
Key Vocabulary		Resources
<p>evaluating, design brief design criteria, innovative, prototype, user, purpose, function, prototype, design criteria, innovative, appealing, design brief, planning, annotated sketch, sensory evaluations, name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet</p>		<p>Range of traditional ingredients, knives, graters, peelers, chopping boards, bowls, plates, pans, oven, seasoning</p>

Lilac Class - Spring 2

Overview	Final Outcome	Suggested Sequence
<p>Use of Materials/ Electrical and Me- chanical</p> 	<p>The London Eye</p>	<ol style="list-style-type: none"> 1. Research The London Eye and other large ferries wheels and explore their structures. 2. Explore how to make structures stable using a range of stiff and flexible materials. 3. Explore a range of joining techniques which support the structure. Also explore motors and circuits to make the structure move. 4. Children to design their own London Eye, thinking about structure, support, design and functionality. 5. Children begin to make their product. 6. Children complete their product, evaluating and making suggested changes.
Key Vocabulary		Resources
<p>evaluating, design brief design criteria, innovative, prototype, user, purpose, function, prototype, design criteria, innovative, appealing, design brief, planning, annotated sketch, sensory evaluations, pulley, drive belt, gear, rotation, spindle, driver, follower, ratio, transmit, axle, motor, circuit, switch, circuit diagram, annotated drawings, exploded diagrams, mechanical system, electrical system, input, process, output, series circuit, fault, connection, toggle switch, push-to-make switch, push-to-break switch, battery, battery holder, bulb, bulb holder, wire, insulator, conductor, crocodile clip, control, program, system, input device, out-</p>		<p>Range of stiff and flexible materials to explore and use, rulers, scissors, masking tape, hacksaws, glue guns, protective equipment, string, pulleys and levers, motors and circuit equipment.</p>

Turquoise Class

Key Knowledge, Skills and Understanding

Design	Make	Evaluate
<p><u>Year 5 Expectations:</u></p> <p>Can I suggest some improvements and say what was good and not so good about my original design?</p> <p>Children know how to generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces to suit their audience.</p> <p>Children know how to use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose.</p> <p>Children know, with confidence, how to apply a range of finishing techniques, including those from art and design.</p> <p>Children know how to draw up a specification for their design- link with Mathematics and Science.</p> <p>Children know how to use results of investigations, information sources, including ICT when developing design ideas.</p> <p>Children know, with confidence, how to select appropriate materials, tools and techniques.</p> <p>Children begin to understand how much products cost to make, how sustainable and innovative they are and the impact products have beyond their intended purpose.</p>	<p><u>Year 5 Expectations:</u></p> <p>Children know how to show a good level of expertise when using a range of tools and equipment.</p> <p>Children know how to select appropriate materials, tools and techniques e.g. cutting, shaping, joining and finishing, accurately.</p> <p>Children know how to 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.</p> <p>Children know and understand how mechanical systems such as cams or pulleys or gears create movement.</p> <p>Children know how more complex electrical circuits and components can be used to create functional products and how to program a computer to monitor changes in the environment and control their products.</p> <p>Children know and understand that mechanical and electrical systems have an input, process and output.</p> <p>Children know how to weigh and measure accurately (time, dry ingredients, liquids).</p> <p>Children know how to use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT.</p>	<p><u>Year 5 Expectations:</u></p> <p>Children know how to explain how they can improve their original design.</p> <p>Children know how to evaluate their product, thinking of both appearance and the way it works.</p> <p>Can I practise my evaluation skills by evaluating existing products against set criteria?</p> <p>Children know how to evaluate a product against the original design specification and by carrying out tests.</p> <p>Children know how to evaluate personally and seek evaluation from others.</p>

Turquoise Class

Key Knowledge, Skills and Understanding

Design	Make	Evaluate
<p><u>Year 6 Expectation:</u></p> <p>Children know how to come up with a range of ideas and designs of innovative, functional and appealing products which are fit for purpose after they have collected information.</p> <p>Children know how to take a user's views and market research into account when designing.</p> <p>Children know how to suggest some alternative plans and say what the good points and drawbacks are about each.</p> <p>Children know how to use cross sectional, computer aided designs and exploded diagrams when planning to show their design.</p> <p>Children know how to produce prototypes to show my ideas.</p> <p>Children know how to accurately apply a range of finishing techniques.</p> <p>Children know how to suggest alternative methods of making if the first attempts fail, identifying the strengths and areas for development in their ideas and products.</p>	<p><u>Year 6 Expectation:</u></p> <p>Children know how to confidently select appropriate tools, materials, components and techniques and use them safely and accurately.</p> <p>Children know how to assemble components to make working models.</p> <p>Children know, with confidence, how to pin, sew and stitch materials together to create a product.</p> <p>Children know when to make modifications as they go along.</p> <p>Children know how to construct products using permanent joining techniques.</p> <p>Children know and understand how mechanical systems such as cams or pulleys or gears create movement.</p> <p>Children know how more complex electrical circuits and components can be used to create functional products and how to program a computer to monitor changes in the environment and control their products.</p> <p>Children know and understand that mechanical and electrical systems have an input, process and output. Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT.</p> <p>Children know how to think about the aesthetic qualities of their work.</p> <p>Children know how to think about the functionality of their work.</p>	<p><u>Year 6 Expectation:</u></p> <p>Children know how to check whether anything could be improved.</p> <p>Can I evaluate appearance and function against the original criteria?</p> <p>Children know how to test and evaluate their final product.</p> <p>Children can say their product is fit for purpose.</p> <p>Children know how to evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests and adapting their product where needed.</p> <p>Children know how to evaluate their work both during and at the end of the assignment. Record their evaluations using drawings with labels.</p> <p>Children know how to evaluate against their original criteria and suggest ways that their product could be improved.</p> <p>Children know how to evaluate if different resources would have improved their product.</p>

Turquoise Class

Key Knowledge, Skills and Understanding

Cooking and Nutrition (to also include design, make, evaluate)

KS2 Expectations:

Children know that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world.

Children know and understand that seasons may affect the food available. Understand how food is processed into ingredients that can be eaten or used in cooking.

Children know and understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source.

Children know and understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.

Children know and understand that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eat well plate' Begin to know that to be active and healthy, food and drink are needed to provide energy for the body.

Children know and understand that different food and drink contain different substances – nutrients, water and fibre – that are needed for health.

Children know and understand how food is processed into ingredients that can be eaten or used in cooking.

Turquoise Class - Spring 1

Overview	Final Outcome	Suggested Sequence
<p>Textiles</p> 	<p>Mayan Worry Dolls</p>	<ol style="list-style-type: none"> 1. Children to research what Mayan worry dolls are and what they were used for. Explore the materials used and how they were made. 2. Children to practise sewing, threading, weaving and knitting techniques. 3. Children to continue to practise the techniques, exploring a range of materials i.e. thread, wool, fabric etc. 4. Children to design worry dolls for others. They must research and find out what their target audience would like the doll to look like, colour etc. 5. Children to produce their own worry dolls applying the techniques. 6. Children to evaluate their dolls against set criteria and make suggested changes.
Key Vocabulary		Resources
<p>design decisions, functionality, authentic, user, purpose, design specification, design brief, innovative, research, evaluate, design criteria, annotate, evaluate, mock-up, prototype, seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces, name of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings,</p>		<p>Threads, wool, fabrics of varying colour, needles - sewing and knitting, glue gun, scissors, pipe cleaners/chicken wire</p>

Turquoise Class - Spring 2

Overview	Final Outcome	Suggested Sequence
<p>Cooking and Nutrition</p>  <p>Scandinavian Meal with Viking Bread</p>		<ol style="list-style-type: none"> 1. Children to research bread and bread recipes from around the world. Discuss the similarities and differences in terms of taste, appearance and ingredients. 2. Children research and explore Viking bread and discuss differences. 3. Children research traditional Viking/Scandinavian foods ensuring that stereotypes are not made. Look at the festivals and traditions too 4. Children taste a range of readily available traditional Scandinavian ingredients and discuss flavours and which work well together. 5. Children to learn and practise safe: peeling, chopping, slicing and grating techniques. Also learn about food hygiene. 6. Children then design their own Scandinavian dish follow a set criteria, thinking about the foods available and the nutritional values. 7. Children to make their Scandinavian dishes, taste their own and others and evaluate against the criteria, suggesting changes they would make. 8. Children to also make Viking bread and serve this with their meal. 9. Children to write up evaluations with suggested changes. <p>Ideas: https://www.planbee.com/bread-the-complete-series</p>
Key Vocabulary		Resources
<p>design decisions, functionality, authentic, user, purpose, design specification, design brief, innovative, research, evaluate, design criteria, annotate, evaluate, mock-up, prototype, ingredients, yeast, dough, bran, flour, wholemeal, unleavened, baking soda, spice, herbs fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality utensils, combine, fold, knead, stir, pour, mix, rubbing</p>		<p>Range of traditional ingredients, knives, graters, peelers, chopping boards, bowls, plates, pans, oven, seasoning</p>

Turquoise Class - Summer 2

Overview	Final Outcome	Suggested Sequence
<p>Use of Materials/Electrical and Mechanical</p> 	<p>Brazilian Carnival Float</p>	<ol style="list-style-type: none"> 1. Children to study and research remote control or mechanical toy cars and explore how they are made. 2. Children to learn about and explore motors and how these make a product move. 3. Children to learn cutting and joining techniques. Children also to explore frames and appropriate materials to make these and the body of the car out of thinking about weight distribution. 4. Children to design their own Carnival float suitable for a Brazilian Carnival. 5. Children to make the frame, circuit and body of the float. 6. Children to complete the Brazilian design on their float. 7. Children to evaluate their product, making suggested changes.
Key Vocabulary		Resources
<p>design decisions, functionality, authentic, user, purpose, design specification, design brief, innovative, research, evaluate, design criteria, annotate, evaluate, mock-up, prototype, reed switch, toggle switch, push-to-make switch, push-to-break switch, light dependent resistor (LDR), tilt switch, light emitting diode (LED), bulb, bulb holder, battery, battery holder, USB cable, wire, insulator, conductor, crocodile clip control, program, system, input device, output device, series circuit, parallel circuit</p>		<p>Wooden dowel of varying thickness, glue gun, hack saw, hole punch, cardboard, decorative materials, wires, switches, motors, cells and cell holders, wheels, cotton reels</p>

Purple Class

Key Knowledge, Skills and Understanding

Design	Make	Evaluate
<p><u>Year 6 Expectations:</u></p> <p>Children know how to come up with a range of ideas and designs of innovative, functional and appealing products which are fit for purpose after they have collected information.</p> <p>Children know how to take a user's views and market research into account when designing.</p> <p>Children know how to suggest some alternative plans and say what the good points and drawbacks are about each.</p> <p>Children know how to use cross sectional, computer aided designs and exploded diagrams when planning to show their design.</p> <p>Children know how to produce prototypes to show my ideas.</p> <p>Children know how to accurately apply a range of finishing techniques.</p> <p>Children know how to suggest alternative methods of making if the first attempts fail, identifying the strengths and areas for development in their ideas and products.</p>	<p><u>Year 6 Expectations:</u></p> <p>Children know how to confidently select appropriate tools, materials, components and techniques and use them safely and accurately.</p> <p>Children know how to assemble components to make working models.</p> <p>Children know, with confidence, how to pin, sew and stitch materials together to create a product.</p> <p>Children know when to make modifications as they go along.</p> <p>Children know how to construct products using permanent joining techniques.</p> <p>Children know and understand how mechanical systems such as cams or pulleys or gears create movement.</p> <p>Children know how more complex electrical circuits and components can be used to create functional products and how to program a computer to monitor changes in the environment and control their products.</p> <p>Children know and understand that mechanical and electrical systems have an input, process and output. Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT.</p> <p>Children know how to think about the aesthetic qualities of their work.</p>	<p><u>Year 6 Expectations:</u></p> <p>Children know how to check whether anything could be improved.</p> <p>Can I evaluate appearance and function against the original criteria?</p> <p>Children know how to test and evaluate their final product.</p> <p>Children can say their product is fit for purpose.</p> <p>Children know how to evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests and adapting their product where needed.</p> <p>Children know how to evaluate their work both during and at the end of the assignment. Record their evaluations using drawings with labels.</p> <p>Children know how to evaluate against their original criteria and suggest ways that their product could be improved.</p> <p>Children know how to evaluate if different resources would have improved their product.</p>

Purple Class - Autumn 1

Overview	Final Outcome	Suggested Sequence
<p>Textiles</p> 	<p>Clothing for Ernest Shackleton</p>	<ol style="list-style-type: none"> 1. Research Ernest Shackleton and his adventures to the Antarctic. Discuss what clothing he would need in order to survive. 2. Research insulators of heat and think about how these can be used in their clothing designs. 3. Research a range of waterproof materials and think about what other qualities his clothing would need. 4. Learn and practise a range of joining techniques in sewing. 5. Children to design an item of clothing for Ernest to wear e.g. a warm hat, warm, waterproof gloves. 6. Children to make their designs.
Key Vocabulary		Resources
<p>function, innovative, design specification, design brief, user, purpose design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional, mock-up, prototype, seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces, name of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings,</p>		<p>Range of materials to explore their properties, tread, needles, insulating materials, tape measures, templates, scissors</p>

Purple Class - Summer

Overview	Final Outcome	Suggested Sequence
<p>Use of Materials/ Electrical and Mechanical</p> 	<p>Turbine</p>	<ol style="list-style-type: none"> 1. Children to research wind turbines and watermills of the Islamic Golden Age. 2. Children to explore a range of materials which could be used to recreate these. 3. Children to learn and practise cutting and joining techniques. 4. Children to design and make their own replica. 5. Children to evaluate their design. 6. Children to research motorised turbines and the use of pneumatics . 7. Children to explore how to create motorised and pneumatic devices. 8. Children to design their own modern day turbine. 9. Children to make their own turbine. 10. Children to evaluate their design.
Key Vocabulary		Resources
<p>function, innovative, design specification, design brief, user, purpose design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional, mock-up, prototype, pulley, drive belt, gear, rotation, spindle, driver, follower, ratio, transmit, axle, motor, circuit, switch, circuit diagram, annotated drawings, exploded diagrams, mechanical system, electrical system, input, process, output, reed switch, toggle switch, push-to-make switch, push-to-break switch, light dependent resistor (LDR), tilt switch, light emitting diode (LED), bulb, bulb holder, battery, battery holder, USB cable, wire, insulator, conductor, crocodile clip control, program, system, input</p>		<p>Range of materials—wooden and plastic, glue guns, saw, drills, cutting blocks, circuit equipment including motors, pulleys, levers, tubes—paper and plastic</p>