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<table>
<tr><th colspan="4">Structures</th></tr>
<tr><th colspan="2"></th><th>Foundation (EYFS)</th><th>Understanding the world; Development matters and Early Learning Goals</th><th>Enrichment/oracy opportunities and links to WGS curriculum</th></tr>
<tr><th colspan="5">Junk modelling</th></tr>
<tr><td rowspan="3">Skills</td><td>Design</td><td>• Making verbal plans and material choices.
• Developing a junk model.</td><td rowspan="4">Early Learning Goals
Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.

Use a range of small tools, including scissors, paint brushes and cutlery.

Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.

Share their creations, explaining the process they have used.</td><td rowspan="4">Oracy
To take turns to speak when sharing ideas.

To speak audibly so they can be heard and understood.

To look at someone who is speaking to them.

To join phrases with words, like if, because, so, could and but.

Links to art curriculum – let’s get crafty unit ad marvellous mark making.</td></tr>
<tr><td>Make</td><td>• Improving fine motor/scissor skills with a variety of materials.
• Joining materials in a variety of ways (temporary and permanent).
• Joining different materials together.
• Describing their junk model, and how they intend to put it together.</td></tr>
<tr><td>Evaluate</td><td>• Giving a verbal evaluation of their own and others’ junk models with adult support.
• Checking to see if their model matches their plan.
• Considering what they would do differently if they were to do it again.
• Describing their favourite and least favourite part of their model.</td></tr>
<tr><td>Knowledge</td><td>Technical</td><td>• To know there are a range to different materials that can be used to make a model and that they are all slightly different.
• Making simple suggestions for how to fix their junk model</td></tr>
<tr><th colspan="5">Constructing a windmill</th></tr>
<tr><th colspan="2"></th><th>Year 1</th><th>National Curriculum- end of KS1 Pupils should be able to:</th><th>Enrichment/oracy opportunities and links to WGS curriculum</th></tr>
<tr><td rowspan="2">Skills</td><td>Design</td><td>• Learning the importance of a clear design criteria.
• Including individual preferences and requirements in a design.</td><td rowspan="2">Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing).</td><td rowspan="2">Oracy
To explain ideas

To listen to others and</td></tr>
<tr><td>Make</td><td>• Making stable structures from card.
• Following instructions to cut and assemble the supporting structure of a windmill.</td></tr>
</table>

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		• Making functioning turbines and axles which are assembled into a main supporting structure. • Finding the middle of an object. • Puncturing holes. • Adding weight to structures. • Creating supporting structures. • Cutting evenly and carefully.	Evaluate their ideas and products against design criteria Build structures, exploring how they can be made stronger, stiffer and more stable.	be willing to change their ideas based on what they have heard. To use appropriate vocabulary specific to the topic at hand. Links to **maths** curriculum – measures, 3D shapes
	Evaluate	• Evaluating a windmill according to the design criteria, testing whether the structure is strong and stable and altering it if needed. • Suggest points for improvements.		
Knowledge	**Technical**	• To understand that cylinders are a strong type of structure (e.g. the main shape used for windmills and lighthouses). • To understand that axles are used in structures and mechanisms to make parts turn in a circle. • To begin to understand that different structures are used for different purposes. • To know that a structure is something that has been made and put together. • To know that the sails or blades of a windmill are moved by the wind. • To know that a structure is something built for a reason. • To know that stable structures do not topple. • To know that adding weight to the base of a structure can make it more stable.		
	Additional	• To know that design criteria are a list of points to ensure the product meets the client's needs and wants. • To know that a windmill harnesses the power of wind for a purpose like grinding grain, pumping water or generating electricity. • To know that windmill turbines use wind to turn and make the machines inside work. • To know that a windmill is a structure with sails that are moved by the wind. • To know the three main parts of a windmill are the turbine, axle and structure. • To know that windmills are used to generate power and were used for grinding flour.		Links to **science** curriculum – electricity Links to **geography** curriculum – sustainable energy Links to **history** curriculum – the Victorians
Baby Bear's chair				
	Year 2		**National Curriculum- end of KS1 Pupils should be able to:**	**Enrichment opportunities and**

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				links to WGS curriculum
Skills	**Design**	• Generating and communicating ideas using sketching and modelling. • Learning about different types of structures, found in the natural world and in everyday objects.	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 Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics Explore and evaluate a range of existing products Build structures, exploring how they can be made stronger, stiffer and more stable	**Oracy** To ask question to find out more about a subject To make connections between what has been said and their own experiences Links to the **art** curriculum – use of differing mediums Links to the **mathematics** curriculum – measures Links to **science** curriculum - materials
	Make	• Making a structure according to design criteria. • Creating joints and structures from paper/card and tape. • Building a strong and stiff structure by folding paper.		
	Evaluate	• Exploring the features of structures. • Comparing the stability of different shapes. • Testing the strength of own structures. • Identifying the weakest part of a structure. • Evaluating the strength, stiffness and stability of own structure.		
Knowledge	**Technical**	• To know that shapes and structures with wide, flat bases or legs are the most stable. • To understand that the shape of a structure affects its strength. • To know that materials can be manipulated to improve strength and stiffness. • To know that a structure is something which has been formed or made from parts. • To know that a 'stable' structure is one which is firmly fixed and unlikely to change or move. • To know that a 'strong' structure is one which does not break easily. • To know that a 'stiff' structure or material is one which does not bend easily.		
	Additional	• To know that natural structures are those found in nature. • To know that man-made structures are those made by people.		
Pavilions				
		Year 4	**National Curriculum- end of KS2 Pupils should be able to:**	**Enrichment opportunities and links to WGS curriculum**
Skills	**Design**	• Designing a stable pavilion structure that is aesthetically pleasing and selecting materials to create a desired effect. • Building frame structures designed to support weight.	Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose,	**Oracy** To carefully consider the words and phrasing they use to express their
	Make	• Creating a range of different shaped frame structures.		

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		• 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.	aimed at particular individuals or groups. Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.	ideas and how this supports the purpose of talk To consider the impact of their words on others when giving feedback To ask probing questions Links to the **art** curriculum – light, shade and pattern Links to the **mathematics** curriculum – measures Y4 link to **LegoLand trip** looking at the structures in Mini Land
	Evaluate	• Evaluating structures made by the class. • Describing what characteristics of a design and construction made it the most effective. • Considering effective and ineffective designs.		
Knowledge	**Technical**	• To understand what a frame structure is. • To know that a 'free-standing' structure is one which can stand on its own.		
	Additional	• 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.		
Playgrounds				
		Year 6	**National Curriculum- end of KS2 Pupils should be able to:**	**Enrichment opportunities and links to WGS curriculum**
Skills	**Design**	• Designing a playground featuring a variety of different structures, giving careful consideration to how the structures will be used, considering effective and ineffective designs.	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. Select from and use a wider range of tools and equipment to perform practical tasks [for example,	**Oracy** To speak fluently in front of an audience To spontaneously respond to increasingly complex questions Links to the **mathematics** curriculum - measures
	Make	• Building a range of play apparatus structures drawing upon new and prior knowledge of structures. • Measuring, marking and cutting wood to create a range of structures. • Using a range of materials to reinforce and add decoration to structures.		
	Evaluate	• Improving a design plan based on peer evaluation. • Testing and adapting a design to improve it as it is developed. • Identifying what makes a successful structure.		

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Knowledge	**Technical**	• To know that structures can be strengthened by manipulating materials and shapes.	cutting, shaping, joining and finishing], accurately. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.	Links to **geography** curriculum – environment, our local area fieldwork
	Additional	• To understand what a 'footprint plan' is. • To understand that in the real world, design, can impact users in positive and negative ways. • To know that a prototype is a cheap model to test a design idea.		
		Mechanisms/Mechanical systems		
		Year 2	**National Curriculum- end of KS1 Pupils should be able to:**	**Enrichment opportunities and links to WGS curriculum**
		Making a moving monster		
Skills	**Design**	• Creating a class design criteria for a moving monster. • Designing a moving monster for a specific audience in accordance with a design criteria.	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. Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.	**Oracy** To ask question to find out more about a subject To make connections between what has been said and their own experiences Links to **science** curriculum – materials Links to **computing** curriculum – programming
	Make	• Making linkages using card for levers and split pins for pivots. • Experimenting with linkages adjusting the widths, lengths and thicknesses of card used. • Cutting and assembling components neatly		
	Evaluate	• Evaluating own designs against design criteria. • Using peer feedback to modify a final design.		
Knowledge	**Technical**	• To know that mechanisms are a collection of moving parts that work together as a machine to produce movement. • To know that there is always an input and output in a mechanism. • To know that an input is the energy that is used to start something working. • To know that an output is the movement that happens as a result of the input. • To know that a lever is something that turns on a pivot. • To know that a linkage mechanism is made up of a series of levers.		

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	Additional	• To know some real-life objects that contain mechanisms.	Evaluate their ideas and products against design criteria. Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.	Y2 link to **MK Museum** and old toys
Pneumatic Toys				
		Year 3	**National Curriculum- end of KS2 Pupils should be able to:**	**Enrichment opportunities and links to WGS curriculum**
Skills	**Design**	● Creating simple design criteria that outline basic functionality and appeal to individual users or target audiences. ● Taking part in structured idea blasting sessions. ● Coming up with more ideas and considering the feasibility of their ideas in the classroom. ● Developing drawing and sketching skills with a focus on clarity and simplicity. ● Developing designs by adding detail and justifications about materials, tools, methods. ● Beginning to recognise the benefit of a range of diagram types or prototypes to communicate ideas. (e.g. sketches, cross-sectional diagram, thumbnail sketches and exploded diagrams).	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. Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. 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.	**Oracy** To be able to use specialist language to describe their own and others' talk To reflect on discussions and identify how to improve To speak with confidence in front of an audience Links to **art** curriculum – sketches Links to **science** curriculum – forces Links to **mathematics** curriculum - measures
	Make	● Selecting equipment required for a series of tasks based on the plan. Explain why each piece is suitable for each stage. ● Suggesting simple safety rules based on their understanding of tool dangers. ● Participating in discussions about classroom safety procedures. ● Cutting out more complex shapes accurately. ● Handle different sizes and types of scissors with confidence. ● Using PVA glue to join corrugated card and light wood (e.g. balsa wood). ● Choosing shapes to suit the function of a product. ● Painting or colouring precisely to improve the finish. ● Making facades from a range of materials. ● Sealing edges with tape to cover gaps in joins.		

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	Evaluate	● Analysing why specific products, designers or inventors are successful. ● Evaluating their designs by comparing them against design criteria and considering feedback from peers to suggest improvements. ● Explaining why they think certain aspects of a peer's design are effective or why they suggested specific improvements. ● Reflecting on feedback to decide if and how it could be used to improve future iterations.	Understand how key events and individuals in design and technology have helped shape the world.	
Knowledge	**Technical**	● Beginning to understand how mechanisms work. ● Recognising pneumatic systems in everyday objects (e.g. car boot, adjustable chair.	Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages].	
	Additional	● To know that a problem or need is something that a designer can help to solve. ● To know that extra information on drawings or diagrams can help the user understand a design or idea. ● To know that thumbnail sketches are less detailed quick sketches. ● To know that a cross-sectional diagram shows the inside of a product. ● To know that an exploded diagram shows how the parts of a product fit together. ● To know that different pieces of equipment will be used at different stages in a plan. ● To know that different tools and equipment have different dangers. ● To know that scissors are useful for cutting out complex shapes, ● To know that designers and inventors create products. ● To know that choices of materials and equipment can affect the final product. ● To know that feedback is ideas and suggestions from other people that can help improve their work. ● To know that they can choose to use feedback or not. ● To understand that a mechanical system can allow us to move something more easily. ● To know that mechanical systems have more than one mechanism that moves to make them work. ● To know that mechanical systems are often hidden in products to make them look more appealing. ● To know that pushing air can be used to move a mechanism.		

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		● To know that pivots can be used to create more movement in the mechanical system. ● To know that a combination of mechanisms can improve a product.		
Mechanical Cars				
		Year 4	**National Curriculum- end of KS2 Pupils should be able to:**	**Enrichment opportunities and links to WGS curriculum**
Skills	**Design**	● Taking part in structured brainstorming sessions. ● Developing drawing and sketching skills with a focus on clarity and simplicity. ● Beginning to recognise the benefit of a range of diagram types or prototypes to communicate ideas. (e.g. sketches, cross-sectional diagram, thumbnail sketches and exploded diagrams) ● Creating prototypes using materials with similar properties to their final design. ● Creating simple design criteria that outline basic functionality and appeal to individual users or target audiences. ● Developing designs by adding detail and justifications about materials, tools, methods.	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. Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. 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.	**Oracy** To carefully consider the words and phrasing they use to express their ideas and how this supports the purpose of talk To consider the impact of their words on others when giving feedback To ask probing questions Links to **mathematics** curriculum – measures Links to **science** curriculum – materials and forces, working scientifically Y4 link to **LegoLand** trip. Robotics workshop
	Make	● Following detailed safety instructions. ● Using a ruler as a measuring tool with increasing accuracy by creating spaced marks using millimetres and measuring lengths of objects. ● Handle different sizes and types of scissors with confidence. ● With close supervision using a hot glue gun to join wooden materials (e.g. lolly sticks). ● Selecting equipment required for a series of tasks based on the plan. Explain why each piece is suitable for each stage. ● Selecting materials, components or ingredients from a wider choice but within a limited design space.		
	Evaluate	● Explaining why they think certain aspects of a peer's design are effective or why they suggested specific improvements. ● Reflecting on feedback to decide if and how it could be used to improve future iterations.		

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		● Investigating and analysing a range of existing products by looking at their functionality and appeal. ● Analysing why specific products, designers or inventors are successful. ● Evaluating their designs by comparing them against design criteria and considering feedback from peers to suggest improvements. ● Evaluating how effective their chosen materials and tools were in fulfilling the design brief.		
Knowledge	**Technical**	● To understand that a mechanical system can allow us to move something more easily. ● To know that mechanical systems have more than one mechanism that moves to make them work. ● To know that mechanical systems are often hidden in products to make them look more appealing.	Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages].	
	Additional	● To know that extra information on drawings or diagrams can help the user understand a design or idea. ● To know that an exploded diagram shows how the parts of a product fit together. ● To know that a prototype is a detailed model that helps a user understand how a product will work. ● To know that a target audience is a group of people that might like the idea. ● To know that different tools and equipment have different dangers. ● To know that a ruler can be used to measure length. ● To know that a hot glue gun can be used to join materials. ● To know that better suggestions of improvements mean better feedback. ● To know that they can choose to use feedback or not. ● To know that some products are more successful than other because of their function. ● To know that choices of materials and equipment can affect the final product. ● To know that feedback is ideas and suggestions from other people that can help improve their work.		
Electrical Systems				
		Year 5	**National Curriculum- end of KS2 Pupils should be able to:**	**Enrichment opportunities and**

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				links to WGS curriculum
Doodlers				
Skills	**Design**	• Identifying factors that could be changed on existing products and explaining how these would alter the form and function of the product. • Developing design criteria based on findings from investigating existing products. • Developing design criteria that clarifies the target user.	Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. 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 their ideas and products against their own design criteria and consider the views of others to improve their work. understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors].	**Oracy** To use an increasingly sophisticated range of sentence stems with fluency and accuracy To speak with flair and passion To be able to draw upon knowledge of the world to support their own point of view Links to **science** curriculum – electricity Y5 link to the **Science Museum** - Wonderlab
	Make	• Altering a product's form and function by tinkering with its configuration. • Making a functional series circuit, incorporating a motor. • Constructing a product with consideration for the design criteria. • Breaking down the construction process into steps so that others can make the product.		
	Evaluate	• Carry out a product analysis to look at the purpose of a product along with its strengths and weaknesses. • Determining which parts of a product affect its function and which parts affect its form. • Analysing whether changes in configuration positively or negatively affect an existing product. • Peer evaluating a set of instructions to build a product.		
Knowledge	**Technical**	• To know that series circuits only have one direction for the electricity to flow. • To know when there is a break in a series circuit, all components turn off. • To know that an electric motor converts electrical energy into rotational movement, causing the motor's axle to spin. • To know a motorised product is one which uses a motor to function.		
	Additional	• To know that product analysis is critiquing the strengths and weaknesses of a product. • To know that 'configuration' means how the parts of a product are arranged.		
Steady Hand Game				
	Year 6		**National Curriculum- end of KS2 Pupils should be able to:**	**Enrichment opportunities and links to WGS curriculum**

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Skills	**Design**	• 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'.	Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. 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 their ideas and products against their own design criteria and consider the views of others to improve their work. understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors].	**Oracy** To speak fluently in front of an audience To spontaneously respond to increasingly complex questions Links to **mathematics** curriculum – measures Links to **science** curriculum – electricity, working scientifically Links to **history** curriculum – toys in the past Links to **art** curriculum – culture and form Y6 link to **Bletchley Park** trip – Enigma machine
	Make	• 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.		
	Evaluate	• Testing own and others finished games, identifying what went well and making suggestions for improvement. • Gathering images and information about existing children's toys. • Analysing a selection of existing children's toys.		
Knowledge	**Technical**	• 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		
	Additional	•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'.		
Cooking and Nutrition				
		Foundation	**Understanding the world; Development matters and Early Learning Goals**	**Enrichment opportunities and links to WGS curriculum**
Designing and making a rainbow salad				

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Skills	**Design**	• Designing a soup recipe as a class. • Designing soup packaging.	**Early Learning Goals** Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary. Use a range of small tools, including scissors, paint brushes and cutlery. Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Share their creations, explaining the process they have used.	**Oracy** To take turns to speak when sharing ideas. To speak audibly so they can be heard and understood. To look at someone who is speaking to them. To join phrases with words, like *if, because, so, could and but.* Links to **maths** curriculum – measures Links to **science** curriculum – healthy lifestyles Links to **PSHE** curriculum – looking after yourself Extra-curricular opportunity – **Cooking Club**
	Make	• Chopping plasticine safely. • Chopping vegetables with support.		
	Evaluate	• Tasting the soup and giving opinions. • Describing some of the following when tasting food: look, feel, smell and taste. • Choosing their favourite packaging design and explaining why.		
Knowledge	**Technical**	• To know that soup is ingredients (usually vegetables and liquid) blended together. • To know that vegetables are grown. • To recognise and name some common vegetables. • To know that different vegetables taste different. • To know that eating vegetables is good for us. • To discuss why different packages might be used for different foods.		
Smoothies				
		Year 1	**National Curriculum- end of KS1 Pupils should be able to:**	**Enrichment opportunities and links to WGS curriculum**
Skills	**Design**	• Designing smoothie carton packaging by-hand. • Learning where and how fruits and vegetables grow.	Use the basic principles of a healthy and varied diet to prepare dishes.	**Oracy** To explain ideas To listen to others and
	Make	• Chopping fruit and vegetables safely to make a smoothie. • Juicing fruits safely to make a smoothie.		

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		• Identifying if a food is a fruit.	Understand where food comes from.	be willing to change their ideas based on what they have heard. To use appropriate vocabulary specific to the topic at hand. Extra-curricular opportunity – **Cooking Club**
	Evaluate	• 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.		
Knowledge	**Technical**	• To know that a blender is a machine which mixes ingredients together into a smooth liquid. • To know that a fruit has seeds and a vegetable does not. • To know that fruits grow on trees or vines. • To know that vegetables can grow either above or below ground. • To know that a vegetable is any edible part of a plant.		
Balanced Diet				
		Year 2	**National Curriculum- end of KS1 Pupils should be able to:**	**Enrichment opportunities and links to WGS curriculum**
Skills	**Design**	• Designing three wrap ideas.	Use the basic principles of a healthy and varied diet to prepare dishes. Understand where food comes from.	**Oracy** To ask question to find out more about a subject To make connections between what has been said and their own experiences Links to **mathematics** curriculum – measures Links to **PSHE** curriculum – healthy lifestyles Links to **science** curriculum – life cycles and health
	Make	• 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. • Spreading soft foods to make a wrap. • Identifying the five food groups. • Learning about a balanced diet.		
	Evaluate	• Describing appearance, smell and taste. • Tasting and evaluating different food combinations. • Describing the information that should be included on a label.		
Knowledge	**Technical**	• To know that 'diet' means the food and drink that a person or animal usually eats. • To know what makes a balanced diet. • To know that the five main food groups are: Carbohydrates, fruits and vegetables, protein, dairy and foods high in fat and sugar. • To know 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 know how to cut, grate, snip and spread to prepare foods.		

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		• To know how to review and give a score to evaluate		Extra-curricular opportunity – **Cooking Club**
Eating Seasonally				
		Year 3	**National Curriculum- end of KS2 Pupils should be able to:**	**Enrichment opportunities and links to WGS curriculum**
Skills	**Design**	• Describing how climate affects where foods grow.	Understand and apply the principles of a healthy and varied diet Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.	**Oracy** To be able to use specialist language to describe their own and others' talk To reflect on discussions and identify how to improve To speak with confidence in front of an audience Links to **mathematics** curriculum – measures Links to **PSHE** curriculum – healthy lifestyles Links to **science** curriculum – life cycles and health Extra-curricular opportunity – **Cooking Club**
	Make	• Identifying seasonal ingredients from the UK. • Following the instructions within a recipe. • Tasting seasonal ingredients. • Peeling foods by hand or with a peeler. • Cutting ingredients safely. • Choosing ingredients based on a design brief.		
	Evaluate	• Describing the texture and flavour of ingredients. • Describing the benefits of seasonal fruits and vegetables and the impact on the environment.		
Knowledge	**Technical**	• To know that seasonal means foods that grow in a given season in a given country. • To know some seasonal foods that grow in the UK and what season they grow in. • To know that eating seasonal foods can have a positive impact on the environment. • To know how to describe the flavour and texture of foods. • To know how to cut and peel safely. • To know that the appearance of food is as important as taste. • To know that similar coloured fruits and vegetables often have similar nutritional benefits.		
Developing a Recipe				
		Year 5	**National Curriculum- end of KS2 Pupils should be able to:**	**Enrichment opportunities and**

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				links to WGS curriculum
Skills	**Design**	• Researching existing recipes. • Suggesting alternative ingredients. • Designing a jar label.	Understand and apply the principles of a healthy and varied diet Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.	**Oracy** To use an increasingly sophisticated range of sentence stems with fluency and accuracy To speak with flair and passion To be able to draw upon knowledge of the world to support their own point of view Links to **science** curriculum – nutrition and movement Links to **mathematics** curriculum – measures Links to **PSHE** curriculum – healthy lifestyles Extra-curricular opportunity – **Cooking Club**
	Make	• Writing an alternative recipe. • Understanding cross-contamination. • Using preparation skills. • Making a developed recipe.		
	Evaluate	• Explaining the farm to fork process. • Analysing nutritional content.		
Knowledge	**Technical**	• To know that beef comes from cows reared on farms. • To know that recipes can be adapted to suit nutritional needs and dietary requirements. • To know that nutritional information is found on food packaging. • To know that coloured chopping boards can prevent cross-contamination. • To know that food packaging serves many purposes.		
Textiles				
		Year 2	**National Curriculum- end of KS1 Pupils should be able to:**	**Enrichment opportunities and links to WGS curriculum**
Puppets				
Skills	**Design**	• Using a template to create a design for a puppet.	Design purposeful, functional, appealing products for themselves	**Oracy**
	Make	• Cutting fabric neatly with scissors.		

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		• Using joining methods to decorate a puppet. • Sequencing steps for construction.	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. Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.	To ask question to find out more about a subject To make connections between what has been said and their own experiences Links to **mathematics** curriculum – measures Extra-curricular opportunity – **Sewing Club**
	Evaluate	• Reflecting on a finished product, explaining likes and dislikes.		
Knowledge	**Technical**			
	Additional			
Pencil Cases - Fastenings				
		Year 4	**National Curriculum- end of KS2 Pupils should be able to:**	**Enrichment opportunities and links to WGS curriculum**
Skills	**Design**	• Writing design criteria for a product, articulating decisions made. • Designing a personalised pencil case.	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. 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,	**Oracy** To carefully consider the words and phrasing they use to express their ideas and how this supports the purpose of talk To consider the impact of their words on others when giving feedback To ask probing questions Links to **mathematics** curriculum – measures
	Make	• Making and testing a paper template with accuracy and in keeping with the design criteria. • Measuring, marking and cutting fabric using a paper template. • Selecting a stitch style to join fabric. • Working neatly by sewing small, straight stitches. • Incorporating a fastening to a design.		
	Evaluate	• Testing and evaluating an end product against the original design criteria. • Deciding how many of the criteria should be met for the product to be considered successful. • Suggesting modifications for improvement. • Articulating the advantages and disadvantages of different fastening types.		
Knowledge	**Technical**	• To know that a fastening is something which holds two pieces of material together for example a zipper, toggle, button, press stud and velcro. • To know that different fastening types are useful for different purposes.		

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		• To know that creating a mock up (prototype) of their design is useful for checking ideas and proportions.	textiles and ingredients, according to their functional properties and aesthetic qualities. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work	Links to the **art** curriculum – colour and pattern Extra-curricular opportunity – **Sewing Club**
Stuffed Toys				
		Year 6	**National Curriculum- end of KS2 Pupils should be able to:**	**Enrichment opportunities and links to WGS curriculum**
Skills	**Design**	• Designing a stuffed toy, considering the main component shapes required and creating an appropriate template. • Considering the proportions of individual components	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. 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 their ideas and products against their own design criteria	**Oracy** To speak fluently in front of an audience To spontaneously respond to increasingly complex questions Links to **mathematics** curriculum – measures Links to **science** curriculum – working scientifically Links to the **art** curriculum – colour and pattern Extra-curricular opportunity – **Sewing Club**
	Make	• 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.		
	Evaluate	• Testing and evaluating an end product and giving point for further improvements.		
Knowledge	**Technical**	• 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		

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			and consider the views of others to improve their work	
Digital World				
		Year 3	**National Curriculum- end of KS2 Pupils should be able to:**	**Enrichment opportunities and links to WGS curriculum**
Wearable Technology				
Skills	**Design**	• Problem solving by suggesting which features on a Micro: bit might be useful and justifying my ideas. • 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.	Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. 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 their ideas and products against their own design criteria and consider the views of others to improve their work.	**Oracy** To be able to use specialist language to describe their own and others' talk To reflect on discussions and identify how to improve To speak with confidence in front of an audience Links to **computing** curriculum micro: bits Links to **science** curriculum – forces, electricity Links to **mathematics** curriculum - measures
	Make	• 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.		
	Evaluate	• Analysing and evaluating wearable technology. • Using feedback from peers to improve design.		
Knowledge	**Technical**	• To understand that, in programming, a 'loop' is code that repeats something again and again until stopped. • 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.		
	Additional	To know what the 'digital revolution' is and the features of some of the products that 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.		

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			Apply their understanding of computing to program, monitor and control their products.	