Potters Gate Primary & St Andrew's Infant Schools Curriculum Subject Progression – D&T

School Curriculum Intent	Cooking and Nutrition	Mechanical systems	Electrical systems	Structures	Textiles
Knowledge What will children know at the end of this unit of work?	Bread, soup and smoothies: To know that food has to be prepared To know how to hygienically make simple items with adult support. To know where to find recipes To know what ingredients are needed to follow a recipe To know how to weigh and measure out food To know that planning is important to achieve an outcome	Flower Press To know the use of a flower press. To know how to use a hand drill. To know the names of different materials.		Egg protectors To know that there is a purpose behind our creations. To know that a structure can be used to protect an object. To know that we can adapt our designs. To know that we can reflect on our design.	
<u>Skills</u> As an expert in this subject children will be able to	To use a range of tools. To locate a recipes To use scales to measure different wet and dry	Use a range of small tools, including scissors, paint brushes and cutlery. To select the correct materials.		Use a range of small tools, including scissors, paint brushes and cutlery. Share their creations, explaining the process they have used; Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function;	
	Allows children to explore their cultural understanding of where food comes from.			Allow children to use their creativity and explore different ways they can create.	

Spiritual Development	Supports spiritual development by allowing pupils the opportunity to exercise imagination, inspiration, intuition and insight through creativity and risk taking in analysing, designing and manufacturing a range of products.	exercise imagination, inspiration, intuition and insight through creativity and risk taking in analysing, designing and manufacturing a range of products.	Supports spiritual development by allowing pupils the opportunity to exercise imagination, inspiration, intuition and insight through creativity and risk taking in analysing, designing and manufacturing a range of products.
Advocacy	To know that ingredients can come from our local community.	We can use them within our local community and flowers that we find in it.	To know that we can work together to develop our designs.
Health & Wellbeing	Understanding the safety of using different tools. To stay safe in a kitchen and around hot appliances.	Understand the safety of using different tools.	Understand the safety of using different tools.
Aspiration Vocabulary What key vocabulary will children know that is new?	 Recipe – a set of instructions for preparing a particular dish, including a list of the ingredients required Ingredients- the foods that are combined to make a particular dish 	Drill Twist Butterfly bolt Screw Push	design Adapt Change Fall Gravity

	Smell – how something smells Taste – how something tastes Mixing – combine or put together to form one substance Blending – the action of mixing or combining things together Cutting – the action of cutting something Baking - cooking food by dry heat without direct exposure to a flame, typically in an oven			
<u>School Values</u> Friendship, Resilience. Justice, Trust	Trust to use tools safely.	Trust to use tools safely.	Trust to use tools safely.	
democracy, the rule of law, individual liberty, and mutual respect and tolerance of those with		B e proud of achievements and allow other children to comment on their final piece of work.	B e proud of achievements and allow other children to comment on their final piece of work.	

Maths	School Curriculum Intent	Cooking and Nutrition	Mechanical systems	Electrical systems	Structures	Textiles
Year 1	Knowledge What will children know at the end of this unit of work?	Pasta sauce with seasonal ingredients. Salad To know how to use seasonal ingredients to create a pasta sauce To know what a seasonal vegetables are.	Creating a moving book. To know how to design a purposeful, appealing and functional product for themselves and others. To know how different mechanisms are used		Windmills To understand that structures can have different purposes. To understand what a windmill is. To describe the purpose of structures? To understand the importance of clear	TEXTILES
		them.	picture book.		design criteria?	

			To understand what a net is	
Skills As an expert in this subject children will be able to	will design and create the pasta sauce for an intended use. Pupils will make and evaluate their dish ccutting skills: use a serrated knife to cut soft foods Food safety: take part in simple clearing up		• Learning the importance of a clear design criteria • Including individual preferences and requirements in a design • Making stable structures from card, tape and glue • Learning how to turn 2D nets into 3D structures • Following instructions to cut and assemble the supporting structure of a windmill • Making functioning turbines and axles which are assembled into a main supporting structure	
Creativity & Cultural Development	Selecting with different ingredient combinations to new creations with resources you have on hand, a culinary experience – cooking – is an art form	Designing and making	Designing and making	
Spiritual Development	development by allowing pupils the opportunity to exercise imagination,	Supports spiritual development by allowing pupils the opportunity to exercise imagination, inspiration,	Supports spiritual development by allowing pupils the opportunity to exercise imagination, inspiration, intuition	

Community & Courageous Advocacy	creativity and risk taking in analysing, designing and	and insight through creativity and risk taking in analysing, designing and manufacturing a range of products.	and insight through creativity and risk taking in analysing, designing and manufacturing a range of products.	
Health & Wellbeing	Being creative	Being creative	Being creative	
Aspiration	Design and Engineering	Design and Engineering	Design and Engineering	
· · · · · · · · · · · · · · · · · · ·	20001	Lever Moving part Picture Join Glue Evaluate Design	Nets Turbines Axles Structures	
<u>School Values</u> Friendship, Resilience. Justice, Trust	Resilience – keep trying when the technique is tricky. Friendship and Trust – working with a partner to achieve a common goal.	Resilience – keep trying when the technique is tricky.	Resilience – keep trying when the technique is tricky.	
individual liberty, and mutual		Mutual respect of other opinions and ideas.	Mutual respect of other opinions and ideas.	

Maths	School Curriculum Intent	Cooking and Nutrition	Mechanical systems	Electrical systems	Structures	Textiles
	<u>Knowledge</u>	Healthy wrap Vegetable frittata	Moving vehicles with wheels and axis			Small pouches To know that sewing is a method of joining
	What will children know at the end of this unit of work?	Designing a healthy wrap based on a food combination which work well together	To know that wheels need to be round to rotate and move.			fabric • To know that different stitches can be used when sewing • To understand the

	using the bridge or claw grip • Constructing a wrap that meets a design brief	To understand that for a wheel to move it must be attached to a rotating axle. To know that an axle moves within an axle holder which is fixed to the vehicle or toy. To know that the frame of a vehicle (chassis) needs to be balanced. To know some real-life items that use wheels.		importance of tying a knot after sewing the final stitch • To know that a thimble can be used to protect my fingers when sewing
Skills As an expert in this subject children will be able to	How to prepare food safely and hygienically. Understanding how to use measuring cups and scales to weigh out the correct quantity needed. • To know that 'diet' means the food and drink that a person or animal usually eats •	Adapting mechanisms. Testing mechanisms, identifying what stops wheels from turning,		• Selecting and cutting fabrics for sewing • Decorating a pouch using fabric glue or running stitch • Threading a needle • Sewing running stitch, with evenly spaced, neat, even stitches to join fabric • Neatly pinning and cutting fabric using a templat

	Carbohydrates, fruits and vegetables, protein, dairy and foods high in fat and sugar • To understand that I should eat a range of different foods from each food group, and roughly how much of each food group • To know that nutrients are substances in food that all living things need to make energy, grow and develop • To know that 'ingredients' means the items in a mixture or recipe • To know that I should only have a maximum of five teaspoons of sugar a day to stay healthy • To know that many food and drinks we do not expect to contain sugar do; we call these 'hidden sugars'				
Creativity & Cultural Development	cook. They will be able to follow a recipe to achieve a planned outcome.	To use their imagination to create a fictional vehicle. To think about future – climate, landscape, getting into space		To use their creativity to create a pouch	
Spiritual Development	Supports spiritual	Supports spiritual development by allowing pupils the		Supports spiritual development by allowing pupils the	

	opportunity to exercise imagination, inspiration, insuition and insight through creativity and risk taking in analysing,	inspiration, intuition and insight through creativity and risk taking in analysing, designing and manufacturing a range		opportunity to exercise imagination, inspiration, intuition and insight through creativity and risk taking in analysing, designing and manufacturing a range of products.
Community & Courageous Advocacy		Thinking the future of their planes. Ambition – going to space		
Health & Wellbeing				
Aspiration		Ambition – going to space		Seamstress
Vocabulary What key vocabulary will children know that is new?	axle axle holder chassis diagram dowel equipment mechanism wheel	fix, stick, glue, tape, stable, build		Stitch Thread Running stich Cutting Template
School Values Friendship, Resilience. Justice, Trust	Resilience – keep trying when the technique is tricky.	Resilience – keep trying when the technique is tricky.	0	Resilience – keep trying when the technique is tricky.
individual liberty, and mutual	IN/ILITII 21 PACHACT AT	Mutual respect of other people's views and opinions.		Mutual respect of other people's views and opinions.

Maths	School Curriculum Intent	Cooking and Nutrition	Mechanical systems	Electrical systems	Structures	Textiles
Year 3	Knowledge What will children know at the end of this unit of work?		Pneumatic Toys: Children will understand the three			Cushions – Understanding the

	Cooking 1: Filled pasta Children to learn new skill of Pasta making — choosing their own filling to make filled pasta and sauce to a condiment used to flavour and enhance the taste of cooked pasta dishes. Cooking 2: Seasonal savoury tart Eating seasonally — to know what food is grown in the UK. Children to create a savoury tart using seasonal ingredients.	types of pneumatic systems. Select appropriate equipment and materials to build a working pneumatic system using a recycled household object. Assemble their pneumatic system within the housing to create the desired motion. Create a finished pneumatic toy that fulfils the design criteria.	process of Applique using a running stitch. Children will understand the design process behind textiles and will be able to know how to create a template and use needles and thread to create an end project. They will know that they can use their skills to help others in the community. To following a design to create a cushion using needle and thread to join the fabric using the applique method.
Skills As an expert in this subject children will be able to	To follow instructions To use and handle cooking equipment safely. To measure and cut accurately. To create a product using own design as a plan. To change and adapt plan where necessary to improve final product. To explain the benefits of seasonal foods. Know that importing food has an impact on the environment.	Design - Use research to develop design criteria. Generate, develop, model and communicate their ideas through discussion. Evaluate – Evaluate their ideas against their own design criteria. Technical knowledge – understand and use mechanical systems.	To use appropriate materials that have been recycled and to select the correct tool to help them to carry this out.

	Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.		
Creativity & Cultural Development	Links to other countries cuisine		
Spiritual Development Community & Courageous	imagination, inspiration, intuition and insight through creativity and risk taking in analysing, designing and	Supports spiritual development by allowing pupils the opportunity to exercise imagination, inspiration, intuition and insight through creativity and risk taking in analysing, designing and manufacturing a range of products. To know where to buy fresh ingredients in our	Supports spiritual development by allowing pupils the opportunity to exercis imagination, inspiration, intuition and insight through creativity and risk taking in analysing, designing and manufacturing a range of products.
Advocacy Health & Wellbeing	Food and personal hygiene Cooking helps to raise self-esteem and confidence. When you learn to master a new dish, you are building new skills such as time management and multi-tasking; overcoming challenges; all of this is helpful for promoting self-reliance and self-assurance	Educational toys are not only helpful in skill development but also the development of social and emotional skills amongst kids.	To understand how to create objects that can be used in the home.
Aspiration			
Vocabulary What key vocabulary will children know that is new?	Mixing, blending, weighing, timing	Pivots, levers, linkages, pressurised air	running stitch, needle thread, applique

<u>School Values</u> Friendship, Resilience. Justice, Trust	Work collaboratively and support peers. To have resilience	Work collaboratively and support peers.		Work collaboratively and support peers. To have resilience
British Values democracy, the rule of law, individual liberty, and mutual respect and tolerance of those with different faiths and beliefs	of ingredients	Having mutual respect of each other's		Having mutual respect for others designs.

Maths	School Curriculum Intent	Cooking and Nutrition	Mechanical systems	Electrical systems	Structures	Textiles
	Knowledge What will children know at the end of this unit of work?	Pasta sauce – use a variety of ingredients to create a bolognaise – substitution and adding ingredients. Italian pasta sauce is an important part of many Italian dishes as it adds flavour, moisture and texture to the dish. It can also be used as a base for other sauces. Scones – To learn to make aa traditional British baked good, popular in the United Kingdom and Ireland, understand that they can make different varieties of scones, including sweet and savoury.			Produce a range of free-standing frame structures of different shapes and sizes. Design a pavilion that is strong, stable and aesthetically pleasing. Select appropriate materials and construction	Book fastening
	Skills As an expert in this subject children will be able to	General practical skills Knife skills Preparing vegetables Use of the cooker Use of equipment Cooking methods			Testing how well different shaped structures perform under load and thinking about how they can be made even	 Designing a personalised book sleeve. Making and testing a paper template with accuracy and

	Sauce making	stronger. Children construct card models of a cuboid, a triangular prism and a cylinder. They place load on each to see which is the strongest and record their results. They will learn about ways that structures can be strengthened and apply these to their models. Once children have learnt techniques for strengthening these shapes, they can apply this when designing and building their own structures in wider work within this topic.	 in keeping with the design criteria. Measuring, marking and cutting fabric using a paper template. Selecting a stitch style to join fabric. Sewing neatly using small regular stitches. Incorporating a fastening to a design. The product is being tested and evaluated against the original design criteria.
Creativity & Cultural Development		This activity sets a challenge which require children to be constructive, creative and think strategically about simple structures.	
	Supports spiritual development by allowing pupils the opportunity to exercise imagination, inspiration, intuition and insight through creativity and risk taking in analysing, designing and manufacturing a range of products	Supports spiritual development by allowing pupils the opportunity to exercise imagination, inspiration, intuition and insight through creativity and risk	Supports spiritual development by allowing pupils the opportunity to exercise imagination, inspiration, intuition and insight through creativity and risk taking in analysing, designing and manufacturing a range of products.
Community & Courageous Advocacy			

Health & Wellbeing	Cooking helps to raise self-esteem and confidence. When you learn to master a new dish, you are building new skills such as time management and multi-tasking; overcoming challenges; all of this is helpful for promoting self-reliance and self-assurance	Central to custainable	Textiles and sewing have a calming effect and can boost self-esteem and well-being of children.
Aspiration			
Vocabulary What key vocabulary will children know that is new?	veg prep blending simmering reducing garnishing	Frame structure — a structure made from thin components e.g. tent. Shell structure — a hollow structure with a thin outer covering. Stability — in relation to a freestanding structure, the extent to which it is likely to fall over if a force is applied. To improve the performance of the structure or improve its appearance.	StitchTemplate
<u>School Values</u> Friendship, Resilience. Justice, Trust	Resilience - it is actively promoted that taking part in activities that require practice helps to build resilience and cooking is no different.	Resilience - it is actively promoted that taking part in activities that require practice helps to build resilience and cooking is no different.	Sewing can teach valuable life lessons, such as patience, resilience, and the importance of learning from mistakes. These personal growth experiences can help in feeling confident and capable in other areas, contributing to overall happiness and mental health
British Values democracy, the rule of law, individual liberty, and mutual	Effective learning and work take place in the classrooms or kitchens where there is	Effective learning and work take place in the classrooms where there is tolerance and	

respect and tolerance of those with	tolerance and mutual		mutual respect for	
different faiths and beliefs	respect for different		different faiths and	
	faiths and beliefs.		beliefs.	

Maths	School Curriculum Intent	Cooking and Nutrition	Mechanical systems	Electrical systems	Structures	Textiles
	Knowledge What will children know at the end of this unit of work?	Quesadilla - to taste and select ingredients that can be used to make a quesadilla. Hummus and pitta bread – to understand how to create bread and an accompanying dip.		Torches Learn about electrical items and how they work and create a torch.	Bee houses To select suitable materials. To know how to design and make an effective house for bees. To know how to use equipment such as saws and hammers safely.	
Year 5	Skills As an expert in this subject children will be able to	To use different cooking methods safely. To understand how to cook wraps in a frying pan. To taste and select items and make sure that there are a range of ingredients to create a balanced wrap. To use an oven and understand how to control the temperature. Pupils will develop and apply their knowledge and understanding of ingredients and healthy eating. Pupils will learn and practise food preparation and cooking skills. Pupils		To learn about electrical items and how they work. can identify electrical products. Identify what electrical conductors and insulators are. Understand that a battery contains stored electricity and can be used to power products.	<u> </u>	

Creativity & Cultural Development	will design and create dishes for an intended user based on research. Pupils will make and evaluate their dish To understand that different cuisines come from different		This activity sets a challenge which require children to be constructive, creative
Creativity & Cultural Development	countries.		and think strategically about simple structures.
Spiritual Development	Supports spiritual development by allowing pupils the opportunity to exercise imagination, inspiration, intuition and insight through creativity and risk taking in analysing, designing and manufacturing a range of products.	Supports spiritual development by allowing pupils the opportunity to exercise imagination, inspiration, intuition and insight through creativity and risk taking in analysing, designing and manufacturing a range of products.	Supports spiritual development by allowing pupils the opportunity to exercise imagination, inspiration, intuition and insight through creativity and risk taking in analysing, designing and manufacturing a range of products.
Community & Courageous Advocacy			
Health & Wellbeing	Cooking helps to raise self-esteem and confidence. When you learn to master a new dish, you are building new skills such as time management and multi-tasking; overcoming challenges; all of this is helpful for promoting self-reliance and self-assurance	Health and wellbeing have always been central to sustainable design.	Health and wellbeing have always been central to sustainable design.
Aspiration	veg prep	battery	
<u>Vocabulary</u>	blending	bulb	

know that is new?	simmering reducing garnishing	buzzer conductor circuit circuit diagram electricity insulator series circuit switch		
School Values Friendship, Resilience. Justice, Trust	Resilience - it is actively promoted that taking part in activities that require practice helps to build resilience and cooking is no different.	promoted that taking part in activities that require practice helps	Resilience - it is actively promoted that taking part in activities that require practice helps to build resilience.	
British Values democracy, the rule of law, individual liberty, and mutual respect and tolerance of those with different faiths and beliefs	Effective learning and work take place in the classrooms or kitchens where there is tolerance and mutual respect for different faiths and beliefs.	work take place in the classrooms where there is tolerance and mutual respect for	Effective learning and work take place in the classrooms where there is tolerance and mutual respect for different faiths and beliefs.	

Maths	School Curriculum Intent	Cooking and Nutrition	Mechanical systems	Electrical systems	Structures	Textiles
Year 6	Knowledge What will children know at the end of this unit of work?	Curry and Rice Come dine with me That 'flavour' is how a food or drink tastes. That many countries have 'national dishes' which are recipes associated with that country. That 'processed food' means food that has been put through multiple changes in a factory.	Diorama – Make Animal Habitats using a mechanical system like gears, pulleys, cams, levers and linkages.		Fairground rides Designing a playground featuring a variety of different structures, considering how the structures will be used	·

	That it is important to wash fruit and vegetables before eating to remove any dirt and insecticides. What happens to a certain food before it appears on the supermarket shelf (farm to fork).			
Skills As an expert in this subject children will be able to	Record the relevant ingredients and equipment needed. Follow a recipe, including using the correct quantities of each ingredient. Write a recipe, explaining the process taken. Explain where certain key foods come from before they appear on the supermarket shelf	Understand that mechanisms are a collection of moving parts that work together in a machine. Understand that there is always an input and output in a mechanism. Identify mechanisms in everyday objects. Understand that a lever is something that turns on a pivot. Understand that a linkage is a system of levers that are connected by pivots.	Considering effective and ineffective designs. 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. 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.	
Creativity & Cultural Development				
Spiritual Development	pupils the opportunity to	Supports spiritual development by allowing pupils the opportunity to	Supports spiritual development by allowing pupils the opportunity to exercise	

Company its 2 Courses	inspiration, intuition and insight through creativity and risk taking in analysing, designing and manufacturing a range of products.	exercise imagination, inspiration, inspiration, intuition and insight through creativity and risk taking in analysing, designing and manufacturing a range of products.	imagination, inspiration, intuition and insight through creativity and risk taking in analysing, designing and manufacturing a range of products.
Community & Courageous Advocacy			
Health & Wellbeing	Cooking helps to raise self- esteem and confidence. When you learn to master a new dish, you are building new skills such as time management and multi-tasking; overcoming challenges; all of this is helpful for promoting self-reliance and self-assurance		
 Aspiration	Jen assarance		
Vocabulary What key vocabulary will children know that is new?	 balance bitter bridge method complement cookbook cross-contamination enhance equipment farm to fork flavours ingredients method Research pairing recipe preparation salty sour storyboard sweet umami 	 axle design criteria input linkage mechanical output pivot wheel 	 apparatus design criteria equipment playground landscape features cladding

<u>Scnool Values</u> Friendship, Resilience, Justice, Trust	Fellowship – working together to make all aspects of the meal.		Teach valuable life lessons, such as patience, resilience, and the importance of learning from mistakes. These personal growth experiences can help in feeling confident and capable in other areas, contributing to overall happiness and mental health	
individual linerty, and mutual	·	Mutual respect – for each other's ideas.	Mutual respect – for each other's ideas.	