

Goldfield Infant and Nursery School D & T Knowledge Map

		Nursery	Year R	Year 1	Year 2
		<p>All KS1 projects:</p> <ul style="list-style-type: none"> • To know what the product is. • To know what the design is for. • To know the purpose of the product. 			
		Units taught across the year	Food Tasting	Smoothie Making (Kapow)	A balanced diet; Wrap making (Kapow) and Pancake Making with Toppings .

Cooking & Nutrition	Key knowledge	<ul style="list-style-type: none"> •Wash hands before eating •Fruit and vegetables come from plants • How to prepare fruit and vegetables that can be peeled by hand 	<ul style="list-style-type: none"> •Wash hands before eating or preparing food •How to hold a knife and use it safely to chop fruit and vegetables 	<ul style="list-style-type: none"> •To know that a blender is a machine which mixes ingredients together into a smooth liquid. <ul style="list-style-type: none"> • To know that a fruit has seeds. • 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 (e.g roots: potatoes, leaves, lettuce, fruit, cucumber.) 	<ul style="list-style-type: none"> • To know that a 'diet' means the food and drink that a person or animal usually eats. <ul style="list-style-type: none"> • To understand what makes a balanced diet. • To know that the five main food groups are; carbohydrates, fruits, vegetables, protein, dairy, and foods high in fat and sugar. • To understand that I should eat a range of different foods from each food group and roughly how much of each food group. • To know that 'ingredients' means the items in a mixture or recipe.
	Key Vocabulary	Plant vegetable chewy apple orange banana strawberry	Sweet sour juicy slimy squashy tomato pear pea cucumber	fruit vegetable seed root healthy peel stem design smoothie slice leaf flavour carton blend blender	Design criteria balanced diet carbohydrate protein dairy ingredients, fat sugar hidden sugar
Unit 2		Construction	Construction	Textiles Making a Puppet (Kapow)	Mechanisms – wind up mechanism. Constructing a Castle.

Design, Making & evaluating	Knowledge	<ul style="list-style-type: none"> • To know how to use construction kits • To know that different construction toys can be used to make new things that can be used in pretend play • To know that a range of materials can be used to make a model • To be able to construct with age appropriate tools with purpose and safely • To know some ways to join materials – temporary and permanent • To know how to use props appropriately for particular stories 	<ul style="list-style-type: none"> • To know they can safely construct with purpose and evaluate their designs • To know that it's ok to make changes • To identify and select resources and tools to achieve a particular outcome • To experiment with exploring and using a variety of materials to create different things and to be able to talk about their uses. • To be able to share ideas and work collaboratively • Select tools and techniques needed to shape, assemble and join a range of media and materials they are using 	<ul style="list-style-type: none"> • To know that 'joining technique' means connecting two pieces of material together. • To know that there are various temporary methods of joining fabric by using staples, glue or pins. • To understand that different techniques for joining materials can be used for different purposes. • To understand that a template (or fabric pattern) is used to cut out the same shape multiple times. • To know that drawing a design idea is useful to see how an idea will look. 	<ul style="list-style-type: none"> • To know the following features of a castle: flags, towers, battlements, turrets, curtain walls, moat, drawbridge and gatehouse and their purpose. <ul style="list-style-type: none"> • To know that a façade is the front of a structure. • To understand that a castle needs to be strong and stable to withstand enemy attack. • To know that a wind up mechanism raises the drawbridge. • To know that a peper net is a flat 2D shape that can become a 3D shape once assembled. • To know that a design specification is a list of success criteria for a product.
	Key Vocabulary	Scissors join cut snip bend Squeeze smooth bumpy bendy flap stick gluestick masking tape glue Push pull in out under over	Threading weaving measure pinch Through plan experiment test waterproof	Cutting, joining, fabric, template, design, puppet	Drawbridge, wind up mechanism, battlements, turrets, moats, structures, mechanism, design,

Unit 3				<p>Constructing a Windmill. (Kapow)</p> <ul style="list-style-type: none"> • To know that a client is a person that I am designing for. • To know that a design criteria is a list of points to ensure the product meets the clients 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. 	<p>Textiles – Sewing a Christmas Tree decoration;</p> <ul style="list-style-type: none"> • To know that sewing is a method of joining fabric. • To know that different stitches can be used when sewing. • To understand the importance of tying a knot after sewing the final stitch. • To know that a thimble can be used to protect fingers when sewing.
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	Knowledge			<p>A structure is something made of parts</p> <ul style="list-style-type: none"> • A strong structure is unlikely to break • Shapes and structures with wide, flat bases or legs are the most stable • To know materials can be folded, rolled, manipulated to improve strength and stiffness • Identify the weakest part of the structure • Join materials using glue tape, staples, hole punch and split pins • Test their own product 	<ul style="list-style-type: none"> • Sewing is a method of joining fabric • To know that different stitches can be used when sewing • To understand the importance of tying a knot after the final stitch • Know the purpose of the product • Use a template • Cut fabric neatly with scissors • Sequence steps for construction • Evaluate and make improvements/changes
	Key Vocabulary			<p>natural man-made structure shape properties stable unstable strong stiff flexible</p>	<p>Fabric template sewing knot needle safety pin needle threader decoration stitch running stitch</p>
Unit 4	Knowledge				<p>Making a model town: Tring</p> <ul style="list-style-type: none"> • To know that a the model town is to be based on Tring. • To identify key buildings and features of Tring to replicate.

	Key Vocabulary				Natural History Museum, Parish Church of St Peter & St Paul, Tring Local History Museum, Market Place, High St Scale, construction,
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