Design Technology Long Term Plans

	Autumn	Spring	Summer
Year 1	Sheet materials– Levers		Food Technology –
Year 2	**Textiles**		**Construction**
Year 3 & 4	**Sheet materials**		**Food Technology**
Year 5		Joining Materials, Food Technology	
Year 6	**Construction**	**Textiles**	

Design Technology Medium Term Overview

	Focus and Skills
Year 1	**<u>Sheet materials – Toy making -levers</u>** Children will investigate different products and their attachments. They will design, make and evaluate their own product and incorporate the following skills. • Fold, tear and cut paper and card, roll paper to create tubes • Cut along lines, straight and curved • Curl paper • Use hole punch • Insert paper fasteners for card linkages • Create hinges • Use simple pop ups • Investigate strengthening sheet materials Investigate joinings temporary, fixed and moving
	<u>Food – seaside picnic</u> Children will investigate different healthy foods and will make their own healthy food plate. They will find out where different foods come from. They will learn about different tools and utensils which are used for cooking and how to use these safely. They will design, make and evaluate their own food and incorporate the following skills. • Develop a food vocabulary using taste, smell, texture and feel • Group familiar food products e.g. fruit and vegetables • Cut, peel, grate, chop a range of ingredients • Work safely and hygienically • Understand the need for a variety of foods in a diet Measure and weigh food items, non statutory measures e.g. spoons, cups
Year 2	**<u>Textiles - puppets</u>** Children will investigate different puppets and practise their sewing skills. They will design, make and evaluate their own puppet and incorporate the following skills. • Colour fabrics using a range of techniques e.g. fabric paints, printing, painting • Cut out shapes which have been created by drawing round a template onto the fabric • Join fabrics by using running stitch, glue, staples, over sewing, tape Decorate fabrics with buttons, beads, sequins, braids, ribbons

	Construction - buggies The children will investigate different vehicles to include axles. The children will then design, make and evaluate their vehicle and incorporate the following skills. • Make vehicles with construction kits which contain free running wheels • Use a range of materials to create models with wheels and axles e.g. tubes, • dowel, cotton reels • Attach wheels to a chassis using an axle • Join appropriately for different materials and situations e.g. glue, tape, • Mark out materials to be cut using a template • Cut strip wood/dowel using hacksaw and bench hook See glue gun used by an adult
Year 3 & 4	**–Sheet materials – pop up books** The children will look at examples of different products and will look at and practise making different folds and linkages. The children will make, design and evaluate their own products and will incorporate the following skills. • Cut slots • Cut internal shapes • Use lolly sticks/card to make levers and linkages • Use linkages to make movement larger or more varied. • Use and explore complex pop ups Create nets
	Food – Children will investigate popular food and investigate different cakes and biscuits, looking at taste, texture and design. They will look at where different foods come from. The children will make, design and evaluate their and will incorporate the following skills. • Develop sensory vocabulary/knowledge using, smell, taste, texture and feel • Analyse the taste, texture, smell and appearance of a range of foods • Follow instructions • Make healthy eating choices from and understanding of a balanced diet • Join and combine a range of ingredients e.g. snack foods • Work safely and hygienically • Measure and weigh ingredients appropriately

<table>
<tr><td rowspan="2">Year 5</td><td><u>Sheet materials</u>
The children will look at examples of different products and how materials have been joined together. They will use the following skills
• Cut slots
• Cut accurately and safely to a marked line
• Join and combing materials with temporary, fixed or moving joinings
• Use a craft knife, cutting mat and safety ruler under one to one supervision if appropriate
Choose an appropriate sheet material for the purpose</td></tr>
<tr><td><u>Food</u>
The children will explore different tastes and textures. They will design, make and evaluate to incorporate the following skills.
• Prepare food products taking into account the properties of ingredients and sensory characteristics
• Select and prepare foods for a particular purpose
• Taste a range of ingredients, food items to develop a sensory food vocabulary for use when designing.
• Weigh and measure using scales
• Cut and shape ingredients using appropriate tools and equipment e.g. grating
• Join and combine food ingredients appropriately e.g. beating, rubbing in
• Decorate appropriately
• Work safely and hygienically
Show awareness of a healthy diet from an understanding of a balanced diet</td></tr>
<tr><td>Year 6</td><td><u>Construction</u>
The children will look at a traditional WW1 trench and will test different materials to use and will investigate electrical circuits including buzzers and bulbs (linked to science lessons). Children will make, design and evaluate their trench and will incorporate the following skills.
• Use bradawl to mark hole positions
• Use hand drill to drill tight and loose fit holes
• Cut strip wood, dowel, square section wood accurately to 1mm
• Join materials using appropriate methods
• Incorporate motor and a switch into a model
• Control a model using an ICT control programme
• Use a cam to make an up and down mechanism.
• Build frameworks using a range of materials e.g. wood, card corrugated plastic to
• support mechanisms
Use glue gun with close supervision</td></tr>
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	<u>Textiles – reusable shopping bag</u> The children will investigate different types of sewing and will practise these. The children will make, design and evaluate the products and will incorporate the following skills. • Create 3D products using pattern pieces and seam allowance • Understand pattern layout • Decorate textiles appropriately often before joining components • Pin and tack fabric pieces together • Join fabrics using over sewing, back stitch or blanket stitch. • Combine fabrics to create more useful properties Make quality products