



Abbey CofE Infant and Nursery School - Design Technology Long Term Plan



(Jesus said) "You are the light of the world. A town built on a hill cannot be hidden. Neither do people light a lamp and put it under a bowl. Instead they put it on a stand, and it gives light to everyone in the house. In the same way, let your light shine before others, that they may see your good deeds and glorify your father in Heaven. (Matthew 5: 14-16) (taken from the Sermon on the Mount)

YEAR	<i>Autumn</i>	<i>Spring</i>	<i>Summer</i>
<i>Nursery</i>	Threaded Christmas decoration	Fruit salad (Food) Building houses (construction materials)	Textured butterfly Textured sea creature
<p><u>Expressive arts-birth-3yrs</u> Explore different materials, using all their senses to investigate them. Manipulate and play with different materials. Use their imagination as they consider what they can do with different materials. Make simple models which express their ideas.</p> <p><u>Physical development- birth-3yrs</u> Build independently with a range of appropriate resources. Develop manipulation and control. Explore different materials and tools.</p> <p><u>Expressive arts- 3/4yrs</u> Explore different materials freely, to develop their ideas about how to use them and what to make. Develop their own ideas and then decide which materials to use to express them. Join different materials and explore different textures. Return to and build on their previous learning, refining ideas and developing their ability to represent them. Create collaboratively, sharing ideas, resources and skills.</p> <p><u>Physical development- 3/4yrs</u> Use one-handed tools and equipment, for example, making snips in paper with scissors.</p>			

	<p>Use a comfortable grip with good control when holding pens and pencils. Show a preference for a dominant hand.</p>		
<i>Reception</i>	<p>Fruit kebab (Food) Fruit, kebab, skewer, knife, chop, cut, bridge grip, healthy, pieces</p> <p>Bug hotel Cardboard, join, masking tape, staplers, layers, stable, sturdy, cut, scissors</p> <p>Christmas decoration (Textiles</p>	<p>Bridge building for the Billy Goats Gruff (structures) Paper, construct, masking tape, secure, bridge, stable, cut, stick, glue, scissors</p> <p>Easter card (Slider) Card, feathers, cut, slider, join, design, glue, Sellotape, moving secure, features, scissors</p>	<p>Weaving for Handa's Surprise (Textiles link) Basket, weave, warp, weft, over, under, pattern, repeated pattern, secure, scissors</p> <p>Junk modelling underwater creatures (link to art and recycling) Materials, glue, masking tape, join, features, cut, details, design, scissors</p>
	<p><u>Expressive arts</u> Return to and build on their previous learning, refining ideas and developing their ability to represent them. Create collaboratively, sharing ideas, resources and skills.</p> <p><u>Expressive arts- ELG</u> 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.</p> <p><u>Physical development</u> Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Suggested tools: pencils for drawing and writing, paintbrushes, scissors, knives, forks and spoons.</p> <p><u>Physical development- ELG</u> Use a range of small tools, including scissors, paint brushes and cutlery.</p>		

<p><i>Year 1</i></p>	<p>Healthy sandwich (Food)</p> <p>Design- The process of planning something. Slider Something that can be moved back and forth.</p> <p>Peel- To pull away the outer skin of a fruit.</p> <p>Slice- To cut into thin flat pieces.</p> <p>Cut/chop- To separate something with a sharp tool into smaller pieces.</p> <p>Healthy foods- Foods from all 5 food groups: fruit, vegetables, grains, proteins and dairy</p> <p>Grate- To cut food into small parts using a tool</p> <p>Claw grip- A safe way of holding food whilst they are being cut</p> <p>Ingredients- A food or product that is combined to make a particular dish.</p> <p>Taste-The sensation of flavour in the mouth.</p> <p>Arrange- Put things in a required order.</p>	<p>Hand puppet (Textiles)</p> <p>Running stitch- a small even stitch run in and out in cloth.</p> <p>Joining techniques- ways to join fabric together</p> <p>Fabric-cloth or other material produced by weaving or knitting.</p> <p>Needle- a thin piece of polished metal with a point at one end and a hole for thread at the other, used in sewing</p> <p>Thread- used for joining fabric together or adding decoration.</p> <p>Template- A pattern, made from card or paper, which is cut around to shape a piece of fabric.</p> <p>Finishing techniques- Ways of decorating fabric such as adding ribbons, buttons, sequins, glitter, fabric paint or wool</p>	<p>Moving picture (leavers)</p> <p>Assemble- To fix all parts together</p> <p>Mechanism- A device used to create movement in a product</p> <p>Lever- A strong surface the pivots allowing a weight to be lifted.</p> <p>Bridge- a short card strip used to keep the lever and linkage mechanisms in place</p> <p>Loose pivot- a paper fastener that joins card strips together</p> <p>Fixed pivot- a paper fastener that joins card strips to the backing card</p> <p>Pivot- A central point on which a mechanism turns or oscillates.</p> <p>Design- The process of planning something.</p> <p>Push- Applying force to move something away</p> <p>Pull- Applying force to move something closer</p> <p>Split pin- a metal pin with two arms passed through a hole, held in place by the springing apart of the arms.</p> <p>Stable Structures</p>
----------------------	--	---	--

PDA - DESIGNING Understanding contexts, users and purposes

PDA 2 - state what products they are designing and making

PDA 3 - say whether their products are for themselves or other users

PDA 4 - describe what their products are for

PDA 5 - say how their products will work

PDA 7 - use simple design criteria to help develop their ideas

PDB - DESIGNING Generating, developing, modelling and communicating ideas

PDB 2 - use knowledge of existing products to help come up with ideas

PDB 3 - develop and communicate ideas by talking and drawing

PMA - MAKING Planning

PMA 2 - select from a range of tools and equipment, explaining their choices

PMA 3 - select from a range of materials and components according to their characteristics

PMB - MAKING Practical skills and techniques

PMB 1 - follow procedures for safety and hygiene

PMB 2 - use a range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components

PMB 4 - assemble, join and combine materials and components

PMB 5 - use finishing techniques, including those from art and design

PEA - EVALUATING Own ideas and products

PEA 1 - talk about their design ideas and what they are making

PEA 2 - make simple judgements about their products and ideas against design criteria

PEB - EVALUATING Existing products

PEB 1 - what products are

PEB 2 - who products are for

PEB 4 - how products work

PEB 5 - how products are used

PEB 7 - what materials products are made from

PEB 8 - what they like and dislike about products

PTK - TECHNICAL KNOWLEDGE Making products work

PTK 2 - about the movement of simple mechanisms such as levers, sliders, wheels and axles

PTK 4 - that a 3-D textiles product can be assembled from two identical fabric shapes

PTK 6 - the correct technical vocabulary for the projects they are undertaking

PCNA - COOKING AND NUTRITION Where food comes from

PCNA 1 - that all food comes from plants or animals

PCNA 2 - that food has to be farmed, grown elsewhere (e.g. home) or caught

PCNB - COOKING AND NUTRITION Food preparation, cooking and nutrition

PCNB 2 - that everyone should eat at least five portions of fruit and vegetables every day

PCNB 3 - how to prepare simple dishes safely and hygienically, without using a heat source

	PCNB 4 - how to use techniques such as cutting and grating		
Year 2	<p style="text-align: center;">Bread (Food)</p> <p>Ingredients- A food or product that is combined to make a particular dish.</p> <p>Measure- the specific amount of an ingredient required.</p> <p>Weighing- to measure the weight or mass of food.</p> <p>Stir- To mix something up</p> <p>Mix- a concoction of several parts combined.</p> <p>Knead- to work and press into a mass with or as if with the hands.</p> <p>Dough- is a paste made from flour by mixing it with a small amount of water.</p> <p>Pour- to send a liquid, fluid, or anything in loose particles flowing, from one container to another, or into, or on something.</p> <p>Prove- to allow the bread dough to rise.</p> <p>Bake- to cook it in a hot oven.</p> <p>Shape- to create the shape and surface of the dough.</p> <p>Plait- a decorative technique for shaping bread, using three strands of dough, which are crossed over the top of one another.</p> <p>Twist- decorative technique to shape bread dough.</p>	<p style="text-align: center;">Wheeled vehicles (Axles and wheels)</p> <p>Assemble- to fix all parts together</p> <p>Mechanism- a device used to create movement in a product</p> <p>Push- applying force to move something away</p> <p>Wheel- wheels are circular objects that roll on the ground helping vehicles and other objects to easily move.</p> <p>Axles- a rod on which one or more wheels can rotate, either freely or be fixed to and turn with the axle.</p> <p>Axle holder- the component through which an axle fits and rotates.</p> <p>Chassis- the frame or base on which a vehicle is built.</p> <p>Dowel- wooden rods used for making axles to hold wheels.</p> <p>23/24- moving picture due to old cross over of projects.</p>	<p style="text-align: center;">Tie Dye Cushion (Textiles)</p> <p>Tie dye- is a colourful pattern used on clothing. It is made by tying a piece of clothing into a tight bundle, and then dyeing it with various colours. This became very popular in the 1960s and '70s.</p> <p>Fabric- cloth or other material produced by weaving or knitting.</p> <p>Running stitch- a small even stitch run in and out in cloth.</p> <p>Pins- used to hold fabric together at the seam line before sewing.</p> <p>Needle - a thin piece of polished metal with a point at one end and a hole for thread at the other, used in sewing</p> <p>Thread- used for joining fabric together or adding decoration.</p> <p>Finishing techniques- Ways of decorating fabric such as adding ribbons, sequins, fabric paint or wool</p> <p style="text-align: center;">Den building (Structures)</p> <p style="text-align: center;">Structure, stable, tarpaulin, clips, wooden poles, team work</p>

	<p>PDA - DESIGNING Understanding contexts, users and purposes</p> <p>PDA 1 - work confidently within a range of contexts, such as imaginary, story-based, home, school, gardens, playgrounds, local community, industry and the wider environment</p> <p>PDA 2 - state what products they are designing and making</p> <p>PDA 3 - say whether their products are for themselves or other users</p> <p>PDA 4 - describe what their products are for</p> <p>PDA 5 - say how their products will work</p> <p>PDA 6 - say how they will make their products suitable for their intended users</p> <p>PDA 7 - use simple design criteria to help develop their ideas</p> <p>PDB - DESIGNING Generating, developing, modelling and communicating ideas</p> <p>PDB 1 - generate ideas by drawing on their own experiences</p> <p>PDB 2 - use knowledge of existing products to help come up with ideas</p> <p>PDB 3 - develop and communicate ideas by talking and drawing</p> <p>PDB 4 - model ideas by exploring materials, components and construction kits and by making templates and mock ups</p> <p>PDB 5 - use information and communication technology, where appropriate, to develop and communicate their ideas</p> <p>PMA - MAKING Planning</p> <p>PMA 1 - plan by suggesting what to do next</p> <p>PMA 2 - select from a range of tools and equipment, explaining their choices</p> <p>PMA 3 - select from a range of materials and components according to their characteristics</p> <p>PMB - MAKING Practical skills and techniques</p> <p>PMB 1 - follow procedures for safety and hygiene</p> <p>PMB 2 - use a range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components</p> <p>PMB 3 - measure, mark out, cut and shape materials and components</p> <p>PMB 4 - assemble, join and combine materials and components</p> <p>PMB 5 - use finishing techniques, including those from art and design</p> <p>PEA - EVALUATING Own ideas and products</p> <p>PEA 1 - talk about their design ideas and what they are making</p> <p>PEA 2- make simple judgements about their products and ideas against design criteria</p> <p>PEA 3 - suggest how their products could be improved</p> <p>PEB - EVALUATING Existing products</p> <p>PEB 1 - what products are</p> <p>PEB 2 - who products are for</p> <p>PEB 3 - what products are for</p> <p>PEB 4 - how products work</p> <p>PEB 5 - how products are used</p> <p>PEB 6 - where products might be used</p> <p>PEB 7 - what materials products are made from</p>		

PEB 8 - what they like and dislike about products

PTK - TECHNICAL KNOWLEDGE Making products work

PTK 1 - about the simple working

characteristics of materials and components

PTK 2 - about the movement of simple mechanisms such as levers, sliders, wheels and axles

PTK 3 - how freestanding structures can be made stronger, stiffer and more stable

PTK 4 - that a 3-D textiles product can be assembled from two identical fabric shapes

PTK 5 - that food ingredients should be combined according to their sensory characteristics

PTK 6 - the correct technical vocabulary for

the projects they are undertaking

PCNA - COOKING AND NUTRITION Where food comes from

PCNA 1 - that all food comes from plants or animals

PCNA 2 - that food has to be farmed, grown elsewhere (e.g. home) or caught

PCNB - COOKING AND NUTRITION Food preparation, cooking and nutrition

PCNB 1 - how to name and sort foods into the five groups in the Eat Well Plate

PCNB 2 - that everyone should eat at least five portions of fruit and vegetables every day

PCNB 3 - how to prepare simple dishes safely and hygienically, without using a heat source

PCNB 4 - how to use techniques such as measuring, kneading and shaping