

Curriculum Overview – Design Technology Y7

Year	Term	Units of Work	Assessment
7	1	<p>Wall Mirror Rationale: To introduce pupils to a range of materials, tools, equipment and machinery. To teach pupils how to use existing products to design. To develop pupils' ability to design in 2D. To teach pupils how to evaluate their work and what they have learnt.</p> <p>Night Light Rationale: To introduce pupils to the basic principles of electricity – current, voltage etc. To develop pupils' understanding of how developments in electronics can impact everyday life. To introduce pupils to a range of basic components and the soldering process.</p>	<p>Design – Pupils must produce a range of design ideas for a children's wall mirror.</p> <p>Manufacturing – Pupils must use a range of tools, equipment and machinery to make their favourite children's wall mirror design idea from plywood.</p> <p>Evaluation – Pupils must evaluate the wall mirror they have produced, (identifying what they learnt, found difficult and found easy) and set targets to help them improve in the future.</p> <p>Technical Understanding – Pupils must produce an information page which explains the basic principles of electricity and electronics and explains how the night light they are to manufacture works.</p> <p>Evaluation – Pupils must evaluate the night light they have produced, (identifying what they learnt, found difficult and found easy) and set targets to help them improve in the future.</p> <p>Manufacturing – Pupils must use a range of tools, equipment and machinery to make an electronic night light.</p>

	2	<p>Jitter Dug Rationale: To reinforce pupils' understanding of the basic principles of electricity. To introduce pupils to a range of new components and mechanical fixings. To develop pupils' ability to solder. To develop pupils' ability to design in 2D.</p> <p>Isometric Drawing Rationale: To reinforce pupils' understanding of the difference between 2D and 3D design. To make pupils aware there is a range of 3D drawing techniques that can be used to present ideas. To introduce pupils to isometric drawing.</p>	<p>Design – Pupils must produce a range of design ideas for a jitter bug.</p> <p>Technical Understanding – Pupils must produce a drawing of a Lego man using isometric projection. They must then render this drawing and apply 'weighted line'.</p>
	3	<p>Food Safety and Hygiene Rationale: To introduce pupils to good safety and hygiene practice in the food rooms. To teach pupils how to weigh ingredients and use different parts of the cooker safely to prepare and cook dishes. To develop pupils' ability to work independently and as part of a team.</p> <p>Celebration Cake Rationale: To research existing products and different target markets. To develop pupils' ability to present design ideas for cakes. To</p>	<p>Manufacturing – Pupils use different parts of the cooker, a range of equipment and methods to make pizza toast, flap jack, fruit salad, pasta bake and scones.</p> <p>Evaluation – Pupils evaluate the WWW and EBI (identifying what they learnt, found difficult and found easy) and set targets to help them improve in the future.</p> <p>Technical Understanding – Pupils complete a booklet focusing on safety, equipment and hygiene.</p> <p>Design – Pupils produce a range of design ideas for celebration cakes.</p> <p>Manufacturing – Pupils demonstrate their ability to use equipment and ingredients to make their favourite celebration cake using the all in one</p>

		<p>teach pupils methods of cake making and decorating.</p> <p>Textiles Book Mark Rationale: To introduce pupils to Textiles. To teach pupils how to use a variety of tools and equipment including the sewing machine safely. To understand how fabrics are used in fashion, interior design, automotive and medical industries. To teach pupils methods of fabric decoration to produce a book mark.</p>	<p>method. Pupils use a variety of finishing techniques to decorate their cake.</p> <p>Evaluation – Pupils must evaluate the final celebration cake, (identifying what they learnt, found difficult and found easy) and set targets to help them improve in the future.</p> <p>Manufacturing – Pupils demonstrate their ability to control and use the sewing machine safely. They tie dye fabric, use fabric crayons and hand embroidery to decorate the book mark before construction.</p> <p>Evaluation – Pupils must evaluate the final book mark (identifying what they learnt, found difficult and found easy) and set targets to help them improve in the future.</p>
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