Curriculum Overview – **Design Technology Y7**

Year	Term	Units of Work	Assessment
7	1	**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.	**Design** – Pupils must produce a range of design ideas for a children's wall mirror. **Make** – Pupils must use a range of tools, equipment and machinery to make their favourite children's wall mirror design idea from plywood. **Evaluate** – 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.
		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.	**Technical Knowledge** – 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. **Evaluate** – 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. **Make** – Pupils must use a range of tools, equipment and machinery to make an electronic night light.

		2	**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. **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.	**Design** – Pupils must produce a range of design ideas for a jitter bug. **Technical Knowledge** – Pupils must produce a drawing of a Lego man using isometric projection. They must then render this drawing and apply 'weighted line'.
		3	**Food Technology – 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. **Celebration Cake** Rationale: To research existing products and different target	**Make** – 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. Pizza toast is the 'make' Key Task for this project. **Technical Knowledge** – Throughout the Food Safety and Hygiene project, pupils fill out a booklet focusing on safety, equipment and hygiene. Pupils complete a summative test at the end of this project to test their technical knowledge. **Design** – Pupils produce a design idea for celebration cake which they then go on to bake and decorate.

		markets. To develop pupils' ability to present design ideas for cakes. To teach pupils methods of cake making and decorating. **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.	**Technical Knowledge** – Pupils must follow a set of instructions to complete sewing machine practice piece. **Make** – 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 finally constructing their final piece. **Technical Knowledge** – Throughout the Book Mark project, pupils fill out a booklet focusing on the basic principles of textiles technology (tools and equipment, the parts of the sewing machine, tie dying, applique etc.). Pupils complete a summative test at the end of this project to test their technical knowledge.