

St Peter's CE Middle School Curriculum Overview

Subject: Design Technology

Year 5	Topic: Food Technology.	Topic: Resistant Materials – Wooden phone holder.	Topic: Textiles – Drawstring bag.
	Concept: Eatwell Guide. Food hygiene and kitchen safety. Methods of combining ingredients. Methods of cooking - baking. Dough making. Knife skills. Greek recipes. Mayan recipes.	Concept: Health and safety in the workshop. Manufactured boards and natural timbers. Existing products – slotted phone holders. Functional and appealing designs. Design briefs. Woodworking. Evaluating designs.	Concept: Types and purposes of bags. Tying fabric to resist dye to create a design. Joining textile materials. Creating a pattern for applique. Hand applique. Using a sewing machine.
	Skills: Food preparation skills. Cleaning skills. Knife skills.	Skills: Product analysis. Following a design brief. Designing a bespoke product. Marking out wood. Cutting accurate straight lines and curves in wood. Smoothing and finishing wood. Evaluating finished outcome.	Skills: Hand applique to decorate textiles. Using a sewing machine to sew straight lines. Tie-dye techniques.
	Outcome: Knowledge of food groups. Knowledge of origins of different foods. Knowledge of food preparation, hygiene and safety in the kitchen. Able to use a recipe. Able to prepare a range of dishes.	Outcome: Knowledge of design process. Knowledge of wood cutting and sanding techniques. Understanding functional and appealing designs. Able to design and make a slotted wooden phone holder. Evaluation.	Outcome: Able to pin fabric together. Able to hand applique. Able to tie fabric to produce a design when dyed. Able to use a sewing machine to construct a drawstring bag. Evaluation.

Year 6	<p>Topic: Resistant Materials – Wooden wheeled toy.</p>	<p>Topic: Textiles – Personalised apron.</p>	<p>Topic: Food Technology.</p>
	<p>Concept: Health and safety in the workshop. Types of timbers – Hardwoods, Softwoods, Manufactured boards. Wooden toys – existing products, appealing designs, safety considerations. Design briefs. Woodworking. Product packaging.</p>	<p>Concept: Using a sewing machine for straight stitch, zig-zag stitch and hemming. Measuring and marking out. Cutting fabric. Machine applique. Block printing as a decorative technique.</p>	<p>Concept: Eatwell Guide for nutrition. Food hygiene and kitchen safety. Methods of combining ingredients. Methods of cooking – baking, boiling, simmering. Knife skills.</p>
	<p>Skills: Understanding types of timbers and their uses. Designing to a brief. Cutting, drilling, shaping and smoothing timber. Constructing simple wheels and axles. Creating packaging. Evaluating.</p>	<p>Skills: Using pins to hold fabric in place for hems. Using a sewing machine (zig-zag stitch and straight stitch) to sew straight lines. Using a sewing machine to applique. Making a printing block and printing fabric.</p>	<p>Skills: Food preparation skills. Cleaning skills. Knife skills. Dough making. Dividing/portioning.</p>
	<p>Outcome: Knowledge of design process. Able to use a variety of woodworking techniques. Design and make a wheeled wooden toy suitable for a young child. Design and make suitable packaging. Evaluation.</p>	<p>Outcome: Able to use different types of stitches on a sewing machine. Able to construct an apron that features a pocket that is creatively decorated with textiles techniques. Able to make and use a printing block. Evaluation.</p>	<p>Outcome: Knowledge of food groups and nutrition. Knowledge of food preparation, hygiene and safety in the kitchen. Able to use a recipe. Able to prepare and cook a range of dishes.</p>

Year 7	Topic: Textiles – Monster soft toy.	Topic: Food Technology.	Topic: Resistant Materials – Layered mirror.
	Concept: Fabric construction – weaving, knitting, felting. Pattern design and making. Machine sewing to a pattern. Seams. Soft toy construction.	Concept: The Eatwell Guide to plan a nutritionally balanced diet. Food hygiene and kitchen safety. Methods of combining ingredients. Methods of cooking – boiling, simmering, baking, frying. Dough making and kneading. Knife skills. Functions of ingredients. Sensory evaluation of finished dish.	Concept: Health and safety in the workshop. Polymers – origin and uses including HIPS, acrylic, bioplastics. Methods of cutting, forming, shaping and joining plastics. Vacuum forming. Methods of cutting and smoothing timber.
	Skills: Weaving using a cardboard loom. Knitting using a ring loom. Wet felting. Using a sewing machine to sew straight and curved lines to construct a 3D item. Designing and making a pattern. Constructing and stuffing a toy.	Skills: Food preparation skills including peeling, chopping, kneading, rubbing-in, creaming, beating. Food cooking skills - boiling, simmering, baking, frying. Cleaning skills. Carrying out a sensory evaluation of finished dish.	Skills: Following a design brief. Accurately cutting and shaping timber to make a former. Operating a vacuum forming machine to thermoform polymers. Using hand tools to cut and smooth wood. Using hand tools to cut and shape sheet acrylics.
	Outcome: Able to construct fabric using different methods. Able to use a sewing machine to construct a monster soft toy featuring their constructed fabric.	Outcome: Knowledge of food groups and nutrition, able to plan a healthy diet. Knowledge of food preparation, cooking, hygiene and safety in the kitchen. Able to use and adapt a recipe. Able to prepare and cook a range of dishes. Able to evaluate dishes using sensory descriptors.	Outcome: Knowledge of plastics including forming. Knowledge of vacuum former and how to use it. Able to cut and file timber accurately to produce a quality finish. Able to cut and shape polymers. Able to design and make a colourful hanging mirror using polymers and timber.

Year 8	Topic: Textiles – E-textiles Christmas cushion.	Topic: Resistant Materials – Wooden cam toy.	Topic: Food Technology.
	Concept: Smart and modern textile materials incl. electro-conductive thread. Electronic circuits. Designing, making and following a pattern. Joining textile materials, by hand and machine. Decorative textile techniques – applique and embroidery.	Concept: Health and safety in the workshop, workshop tools. Types of timbers – Hardwoods, Softwoods, Manufactured boards. Isometric drawing. Cams and mechanical toys. Writing a design brief.	Concept: Food hygiene and kitchen safety. Methods of combining ingredients. Methods of cooking - boiling, simmering, baking, frying. Functions of ingredients. Dough making. Knife skills. Designing a recipe. Fairtrade. Food labelling.
	Skills: Cutting fabrics. Making and following a pattern. Hand stitching techniques. Sewing machine use to join fabrics and create a 3D item. Applique and Embroidery techniques. Applying Velcro as a fastening. Constructing a working electronic circuit.	Skills: Understanding types of timbers and their uses. Writing and following a design brief. Drawing in isometric. Cutting, joining and smoothing a variety of timber stock forms. Creating cams. Evaluating.	Skills: Food preparation skills including peeling, chopping, slicing, kneading, whisking, creaming, beating. Food cooking skills - boiling, simmering, baking, frying. Cleaning skills. Designing recipes.
	Outcome: Able to cut and pin fabric, hand and machine sew. Able to design and construct a removable cushion cover with a light-up feature. Able to decorate textiles using a range of techniques. Understand simple electronic circuits and able to create a working circuit.	Outcome: Knowledge of design process. Able to draw some forms in isometric. Able to safely use workshop tools with different timber stock forms to make a working wooden cam toy. Evaluation.	Outcome: Knowledge of food groups and nutrition, able to design a recipe. Knowledge of food preparation hygiene and safety in the kitchen. Able to prepare and cook a range of dishes. Knowledge of global origins of ingredients and the Fairtrade vision. Understanding of food labelling.