**St Peter’s CE Middle School Curriculum Overview**

**Subject: Design Technology**

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| **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.** | **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 and products.** | **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 join fabrics with 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.** |

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| **Year 6** | **Topic:** **Resistant Materials – Wooden wheeled toy.** | **Topic:** **Textiles – Personalised apron.** | **Topic:** **Food Technology.** |
| **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 / promotion.** | **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.** | **Concept:** **Eatwell Guide for nutrition.****Food hygiene and kitchen safety.****Methods of combining ingredients.****Methods of cooking – baking, boiling, simmering.** **Knife skills.** |
| **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 / promotion items.****Evaluating.** | **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.** | **Skills:** **Food preparation skills.****Cleaning skills.****Knife skills.****Dough making.****Dividing/portioning.** |
| **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 / promotion items.****Evaluation.** | **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.** | **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.** |

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| **Year 7** | **Topic:** **Textiles – Personalised apron.** | **Topic:** **Food Technology.** | **Topic:** **Resistant Materials – Layered mirror.** |
| **Concept:** **Textile uses, natural and synthetic fibres.****Using a pattern and cutting fabric.****Using a sewing machine.****Hemming and joining textile materials.****Decorative textile techniques – applique, block printing.** **Anthropometric data.** | **Concept:** **Eatwell Guide.****Food hygiene and kitchen safety.****Methods of combining ingredients.****Methods of cooking – boiling, baking, frying.****Dough making.** **Knife skills.****Roman recipes.****Medieval recipes.** | **Concept:** **Health and safety in the workshop.****Plastics – origin and uses including HIPS, acrylic, bioplastics.****Design specification, ACCESSFM.****Methods of cutting, forming, shaping and joining plastics.****Vacuum forming.****Methods of cutting and smoothing wood.** |
| **Skills:** **Threading and using a sewing machine to sew straight and curved lines.** **Measuring and marking out.****Following a pattern.****Machine applique.****Making a printing block and printing fabric.** | **Skills:** **Food preparation skills.****Cleaning skills.****Knife skills.** | **Skills:** **Creating a design specification.****Designing.****Accurately cutting and shaping wood to make a former.****Operating a vacuum forming machine to form HIPS.****Using hand tools to cut and smooth wood.****Using hand tools to cut and shape sheet acrylics.** |
|  | **Outcome:** **Knowledge of food groups and nutrition.****Knowledge of food preparation hygiene and safety in the kitchen.****Able to use and adapt a recipe.****Able to prepare and cook a range of dishes.** | **Outcome:** **Knowledge of plastics.****Knowledge of vacuum former and how to use it to form HIPS.****Able to cut and file wood accurately to produce a quality finish.****Able to cut and shape acrylic.****Design and make a colourful hanging mirror using plastics and wood.** |

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| **Year 7** | **Topic:** **Textiles – Monster soft toy.** | **Topic:** **Food Technology.** | **Topic:** **Resistant Materials – Thermo-formed clock.** |
| **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 a 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.****Designing and making a pattern.****Hand or machine sewing straight and curved lines to construct a 3D item.** **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 a 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 plastics.** |
| **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 origins and uses.****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 wall clock using polymers and timber.** |

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| **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.****Cams and mechanical toys.****Isometric drawing.****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:** **Constructing a working electronic circuit.****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.** | **Skills:** **Understanding cams and how they work.** **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:** **Understand simple electronic circuits and able to create a working circuit.****Able to cut and pin fabric.****Able to 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.** | **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.** |