

The Saints Academies
St. Peter's CE Academy
Progression in Design and Technology



Year Group and Cycle	Knowledge	Skills	Vocabulary	Resources
EYFS Year A	Autumn 1 Castles (junk modelling) Know that junk modelling is when you create something exciting and new from discarded items (thrown away items).	Autumn <u>Evaluate artists, architects and designers:</u> - Look carefully at a range of junk modelling examples and structures e.g. a castle, bus etc. How have these been made? Which materials have been used? <u>Design, techniques and create:</u> - Draw a plan of what they what to create. Which materials are they going to use? How are they going to join the materials? - Experiment fixing and joining materials together to develop and understanding which are best. - Experiment with, construct and join recycled, natural and man-made materials. <u>Evaluate:</u> Review what they have done and say what they think and feel about it. Possibly identify what they might change.	Cut, stick, glue, join, bend, tie, paint, fix, bond, design, adapt	Cardboard, tubes, straws, boxes, tape, glue, string, scissors, paint, paper, bottles

	<u>Autumn 2</u> African Animal Masks • Know that different materials have different textures, strength and purposes. • Begin to understand joining methods.	<u>Autumn</u> <u>Evaluate artists, architects and designers:</u> • Look carefully at a range of materials. Which one will be best suited for their animal mask? Which colour/pattern should they use? <u>Design, techniques and create:</u> • Draw a plan of what they what to create. Which materials are they going to use? How are they going to join the materials? • Experiment fixing and joining materials together to develop and understanding which are best. • Experiment with, construct and join recycled, natural and man-made materials. <u>Evaluate:</u> Review what they have done and say what they think and feel about it. Possibly identify what they might change.	Cut, stick, glue, join, bend, tie, paint, fix, bond, design, adapt, pattern, colour.	Cardboard, tubes, straws, boxes, tape, glue, string, scissors, paint, paper, bottles
	<u>Spring</u> People Who Help Us – Puppets • Know that different materials have different textures, strength and purposes. • Begin to understand joining methods.	<u>Spring</u> <u>Evaluate artists, architects and designers:</u> • Look carefully at a range of materials. Which one will be best suited for their puppet? Which colour/pattern should they use? <u>Design, techniques and create:</u> • Draw a plan of what they what to create. Which materials are they going to use? How are they going to join the materials? • Experiment fixing and joining materials together to develop and understanding which are best. • Experiment with, construct and join recycled, natural and man-made materials. <u>Evaluate:</u> Review what they have done and say what they think and feel about it. Possibly identify what they might change.	Paper mâché, join, colour, paint, cut, stick, join, fix	glue, water, newspaper, paint,

Early Years Year B	<u>Autumn</u> <u>Making toys</u> • Know that objects are designed for a purpose. • Know that different materials (paper, fabric, string, card) can be joined and shaped in various ways. • Know what a repeating pattern is — shapes, colours, or marks that repeat in a sequence.	<u>Autumn</u> <u>Evaluate artists, architects and designers:</u> • Explore how designers and makers in the past created toys from simple materials (wood, paper, fabric, string). • Understand that designers often decorate objects to make them appealing, using patterns and colour. <u>Design, techniques and create:</u> • Plan and make a cup-and-ball toy or sock puppet. Consider how it will work and what it will look like. • Combine materials in creative ways to construct and join parts safely. <u>Evaluate:</u> Review what they have done and say what they think and feel about it. Possibly identify what they might change.		
	<u>Spring 1</u> <u>Junk Modelling transport</u> • Junk modelling involves making things out of recyclable materials and everyday household items. • Using materials such as cardboard, plastic bottles, egg cartons, and fabric scraps, children can transform trash into a transport. You can join material using different ways including, gluing, taping and tying.	<u>Spring 1</u> <u>Design:</u> • Look at examples for inspiration and ideas. • Talk about ideas and record them by drawing (design), using shape and colour. • Safely use and explore a variety of materials, tools and techniques, experimenting with design. <u>Make:</u> • Experiment fixing and joining materials together to develop and understanding which are best. • Experiment with, construct and join recycled, natural and man-made materials. • Use paint colours best suited to model. <u>Evaluate:</u> • Look carefully at a range of junk modelling examples and structures e.g. bus, boat etc. How have these been made? Which materials have been used? • Share creation, explaining the process that has been used.	Draw, colour, design, build, join, tape, glue, junk, model, cardboard, plastic, paint	Cardboard, boxes, lids, plastic, cello tape, PVA glue, glue sticks, masking tape, scissors, pens, paint, model examples

		Would you change anything about your design? If so, why? Return to and build previous learning, refining ideas and developing ability to represent them.		
	<u>Spring 2</u> Basket weaving - Weaving is passing threads or strips over and under each other. - Weaving can be used to create different objects such as baskets, bags, materials. - A loom is a device used to weave.	<u>Spring 2</u> Design: - Look at examples of weaving, discuss how we think they are made. - Explore weaving in different ways i.e. natural materials, large scale using ribbon. Make: - Experiment weaving in different ways i.e. natural materials, large scale using ribbon. - Create cardboard loom (with support). - Order coloured paper strips to weave. - Weave paper strips, using the learnt technique of over and under. Evaluate: - Share creation, explaining the process that has been used. - Have the strips of paper been weaved correctly? Over and under? - Did you find anything challenging?	Weave, in, out, over, under, thread, loom	Cardboard, string, scissors, colouring paper strips
Key Stage 1 Year A	<u>Autumn:</u> Textiles – Design, make and evaluate a handsewn Christmas puppet - Know that puppets are usually made with a fabric body and hollow head that fits over and is moved by the hand. - Know that a running stitch is the basic stitch in hand sewing. - Know that all other forms of sewing are based on the running stitch.	<u>Autumn:</u> Design: - Generate and clarify ideas through discussion to develop a design criteria to ensure their product is fit for purpose and aimed at particular individuals or groups. - Use annotated sketches and appropriate information to develop and communicate their ideas. - Generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches/drawings.	Explore, fabric, textile, lace, felt, corduroy, jean, satin, silk, cotton, velvet, velour, ribbon, wool, fur, join, attach, design, criteria, materials, tools, annotated drawing, evaluate, cut, running stitch	Fabric puppet examples, a selection of different fabrics, plastic needles, thread, scissors, mini staplers, PVA glue, puppet templates, coloured

	- Understand that handsewn toys are sewn by hand rather than with a sewing machine. - Know that materials can be joined together by glueing, stapling, screws, tape and paper fasteners.	<u>Make:</u> - Order the main stages to make their product. - Select and use appropriate tools i.e. scissors to cut accurately. - Thread a needle and create a running stitch to stitch two pieces of fabric together. - Select a material and shape it. - Join fabrics together and attach different materials. - Add features using appropriate materials and techniques. <u>Evaluate:</u> - Investigate and evaluate a range of products including the materials and techniques that are used to compare to their own. - Test and evaluate their own products against their design criteria and the intended user and purpose. - Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work.		pencils, pencils, felt, pom poms, sequins, buttons, ribbon
	<u>Summer:</u> Cooking and nutrition – Design, make and evaluate a fruit salad - Name different fruits and vegetables. - Understand that food can be grown above and below the ground - Know that root vegetables are the roots of plants and grow underground. - Know that root vegetables sometimes have leafy, green stems that grow above ground. - Explain why fruit and vegetables need to be eaten. - Explain where different fruits come from. - Know there are different types of salads, including pasta, fish and fruit.	<u>Summer:</u> <u>Design:</u> - Generate and clarify ideas through discussion to develop a design criteria to ensure their product is fit for purpose and aimed at particular individuals or groups. - Use annotated sketches and appropriate information to develop and communicate their ideas. - Generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches/drawings. <u>Make:</u> - Order the main stages to make their product. - Prepare ingredients hygienically using appropriate utensils. - Use kitchen equipment safely when preparing food. - Assemble, peel, cut and combine ingredients.	Fruit, vegetable, plant, evaluate, root, salad, texture, smell, appearance, taste, hygiene, blend, grate, mix, peel, chop, slice, the bridge, the claw, fork safe, combine, recipe	Variety of fruit and vegetables, a selection of salads, plastic spoons, paper bowls, aprons, chopping boards, peelers, bowls, graters, safe knives, scissors, teaspoons, tablespoons

	Know the names of utensils and their purpose.	- Select appropriate utensils and equipment i.e. knife to chop safely. - Follow a simple recipe. - Prepare and make a healthy salad made from root vegetables. <u>Evaluate:</u> - Investigate and evaluate a range of products including the ingredients and techniques that are used to compare to their own. - Test and evaluate their own products against their design criteria and the intended user and purpose. - Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work.		
Key Stage 1 Year B	<u>Autumn:</u> Moving mechanisms – Design, make and evaluate a moving picture - Know that a mechanism is a set of moving parts that work together to make something happen. - Know there are different types of mechanisms, such as levers, wheels and sliders. - Know that a lever mechanism turns around and is supported by a pivot point. - Know that a pivot point is a fixed point that turns (split pin). - Know that a wheel and axle mechanism connect one or more wheels to an axle. - Know that an axle is a bar that passes through the centre of the wheel (split pin). - Know that a slider mechanism has a bar (lollipop stick) that moves	<u>Autumn:</u> <u>Design:</u> - Generate and clarify ideas through discussion to develop a design criteria to ensure their product is fit for purpose and aimed at particular individuals or groups. - Use annotated sketches and appropriate information to develop and communicate their ideas. - Generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches/drawings. <u>Make:</u> - Order the main stages to make their product. - Make a slider, lever and disc mechanism and use it in a product to make a picture move. - Measure and cut accurately using appropriate tools. - Fix a slider to a character that is going to move and assemble it. - Decide where a pivot needs to be for the product to work. - Use a split pin to assemble a lever and disc that is going to move.	Moving, picture, book, story, lever, slider, pivot, wheel, push, pull, direction, up, down, left, right, evaluate, product, assemble, fix, split pin, disc, reassemble, cut, draw, design criteria, annotated sketch, idea, discuss, choose, drawing, label, appealing, make, improve	Examples of books with moving parts, lollipop sticks, scissors, paper, card strips, split pins, glue, playdough or blue tack, card discs with holes in the centre, felt tips, pencils, card or paper

	forwards and backwards or side to side.	<u>Evaluate:</u> - Investigate and evaluate a range of products including the materials and techniques that are used to compare to their own. - Test and evaluate their own products against their design criteria and the intended user and purpose. - Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work.		
	<u>Spring:</u> Textiles – Design, make and evaluate a handsewn toy butterfly - Know that toys are made from fabric so they are pleasant to hold. - Know that an over stitch is a stitch where the needle and thread go over the edges of the material. - An over stitch keeps the material closed. - Understand that handsewn toys are sewn by hand rather than with a sewing machine. - Know there are other types of stitches, including running and backstitch. - Know that materials can be joined together by glueing, stapling, screws, tape and paper fasteners.	<u>Spring:</u> <u>Design:</u> - Generate and clarify ideas through discussion to develop a design criteria to ensure their product is fit for purpose and aimed at particular individuals or groups. - Use a computer program to develop a design. - Use annotated sketches and appropriate information to develop and communicate their ideas. - Generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches/drawings. <u>Make:</u> - Order the main stages to make their product. - Select and use appropriate tools i.e. scissors to cut accurately. - Thread a needle and stitch two pieces of fabric together using an over stitch. - Select a material and shape it. - Join fabrics together and attach different materials. - Add features using appropriate materials and techniques. <u>Evaluate:</u> - Investigate and evaluate a range of products including the materials and techniques that are used to compare to their own.	Evaluate, product, existing, design, program, graphics, computer, template, felt, accurately, skill, needle, thread, running stitch, back stitch, over stitch, seam, materials, join, select, properties, sew	Examples of handsewn toys, computers (Purple Mash), objects for symmetry, plastic needles, threading cards, thread, butterfly templates, pom poms, buttons, pipe cleaners, felt, sequins, glue, PVA glue, mini staplers, stuffing

		• Test and evaluate their own products against their design criteria and the intended user and purpose. • Evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work.		
Key Stage 2 Year A	Autumn Chocolate Bar Design and Advertising (ICT Focus) • That designers plan and test ideas before making a product. • How to create a logo, slogan, and packaging design using ICT tools. • How to use Purple Mash to add text, images, and colours to a design. • That products are made for a target audience. • That attractive packaging helps products sell. • That clear, bold designs make brands easy to recognise.	• Research examples of successful branding and packaging. • Design and test ideas digitally before finalising a product. • Use ICT software (Purple Mash) to combine text and images effectively. • Apply graphic design principles such as balance, contrast, and alignment. • Present and evaluate their final design, explaining design choices.	Design Logo Slogan Branding Target audience Packaging Graphics Purple Mash	Purple Mash
	Spring Designing and Making Magnetic Games • That games are designed with a clear purpose and audience in mind. • That magnetism can be used in design to make moving parts or interactive features. • How to design, plan, and make a magnetic game using mixed media and simple mechanisms. • That designers test and refine ideas during the making process.	• Research examples of board and magnetic games for inspiration. • Create sketches and annotated plans showing how their game will work. • Use a range of materials (card, magnets, paper, paint) to construct a game board and pieces. • Experiment with layout, typography and illustration to enhance appearance. • Test their game and make improvements based on feedback. • Evaluate the functionality and appeal of their finished product	Design brief Mechanism Magnetism Prototype Layout Function Evaluation	Card, magnets, paper, paint, scissors, glue

	Summer Designing, Making and Evaluating Sandwich Snacks • That designers plan, make and evaluate food products based on a design brief. • That sandwiches can be made using a range of ingredients, textures, and flavours. • That food hygiene and safety are important when preparing food. • How to design a sandwich that appeals to a specific target audience. • How to evaluate taste, appearance and presentation of food products.	• Research different types of sandwiches and fillings. • Design and plan their own sandwich, selecting suitable ingredients. • Use safe cutting, spreading and assembling techniques. • Present food attractively using colour and balance. • Taste and evaluate their own and others' sandwiches, suggesting improvements. • Record their design and evaluation process clearly.	Design brief Ingredients Texture Flavour Hygiene Evaluate Presentation Target audience	Bread, sandwich fillings, butter knife
Key Stage 2 Year B	Autumn Designing, Making and Evaluating a Shaduf • That a shaduf is an ancient Egyptian device used to lift water from the Nile for irrigation. • That the design process involves researching, planning, making, and evaluating. • That a lever mechanism consists of a beam and pivot that helps lift a load. • How to use materials and tools safely to build a working model. • That testing and improving designs is part of the DT process	• Investigate how levers and pivots work in everyday mechanisms. • Design a functional model shaduf, drawing a clear plan before making. • Select appropriate materials and tools for building. • Construct and assemble parts securely to allow movement. • Test their model and identify what works well and what could be improved. • Evaluate the effectiveness of their design based on stability, strength, and function	Shaduf Lever Pivot Mechanism Structure Design brief Evaluate	Construction materials
	Spring Designing, Making and Evaluating a Tudor House Model • That Tudor houses had distinctive timber frames, white panels, and thatched or tiled roofs.	• Research and identify key features of Tudor architecture. • Create a design plan or sketch of a Tudor-style building. • Measure, cut, and join materials accurately to make a 3D model.	Structure Framework Architecture Design brief Joining techniques Model Stability	Boxes, paper, paint, pencils, glue, tissue paper, scissors, cardboard

	• That designers plan, make, and evaluate models for a purpose. • How to use materials such as card, wood, and paint to construct a model house. • That a strong structure needs a solid base and careful joining techniques. • That designs are improved through testing and evaluation.	• Use recycled and construction materials to create texture and pattern (e.g., wattle and daub effect). • Paint and decorate the model to reflect Tudor design details. • Evaluate the final product, considering stability, accuracy, and appearance	Evaluate	
	Summer Designing, Making and Evaluating Air Raid Shelters • That air raid shelters were built during World War II to protect people from bombs. • That shelters such as Anderson and Morrison shelters were designed using strong materials and specific shapes for protection. • That designers and engineers must consider strength, structure, and function when creating a product. • How to use different construction materials to make a strong, stable model. • That the design process involves planning, testing, making, and evaluating.	• Research types and purposes of WWII air raid shelters. • Design a model showing the key features of an Anderson or Morrison shelter. • Select and use materials and tools to construct a strong and stable structure. • Apply joining techniques such as folding, gluing, and reinforcing for durability. • Test their model for strength and stability. • Evaluate the success of their design against the brief and suggest improvements	Structure Reinforce Anderson shelter Morrison shelter Prototype Function Design brief Evaluate	Card, paper, boxes, glue, scissors, tissue paper,