

Oldswinford CE Primary School
DT Skills Progression

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		Boat Page from a Book	Tudor Style House Hand Puppet Sliders	Bridge Shadow Puppet	Seasonal Stocking Game	Vehicle Toy Windmill	Viking House Christmas Decoration
Developing, planning and communicating ideas.	Generating ideas	Draw on their own experience to help generate ideas Suggest ideas and explain what they are going to do Develop their design ideas applying findings from their earlier research Research boat shapes and use in design. Research books with moving elements.	Generate ideas by drawing on their own and other people's experiences Draw Tudor style houses and label. Show hand puppets. How do they work? Show pre-made template. Look at how a slider operates on a card.	Generate ideas for an item, considering its purpose and the user/s Research bridge designs and evaluate them aesthetically. Discuss structure types. Research shadow puppets – history, different styles, effectiveness, science.	Generate ideas, considering the purposes for which they are designing Discover the history of stockings and look at designs. Research types of games including those using magnets and electrical systems.	Generate ideas through brainstorming Use results of investigations, information sources, including ICT when developing design ideas Research moving vehicles – label parts, eg. axle, chassis, body, wheel. Research though scientific enquiry how their vehicle could move. Look at toys that move through cams, pulleys and levers. Make a class collage from computer print outs / magazines / catalogues. Research renewable energy – how do wind turbines work. Find different windmill patterns pieces and test effectiveness before choosing one.	Communicate their ideas through detailed labelled drawings Research Viking house shapes. Compare to other building shapes and note the differences through labelled drawings. Independent / group research using internet, collage and label soft decoration designs and materials /styles used.

	Purpose and success criteria	Identify a target group for what they intend to design and make To be able to explain their picture to a friend.	Identify a purpose for what they intend to design and make Identify simple design criteria Class project – a street of Tudor Style houses. Create design criteria together. Choose an individual that they could make a superhero puppet for. Explain choice.	Identify a purpose and establish criteria for a successful product. Build a strong bridge that crosses a given span. Decide audience and their expectations. Scientific investigation of shadows.	Evaluate products and identify criteria that can be used for their own designs Design – colours, patterns for embellishing a stocking. Why are magnets a good idea in a game? Why would a buzzer or switch make a game fun?	Identify a purpose for their product Draw up a specification for their design Design a vehicle including how it will be powered. Design a child's toy that will use one or more mechanical system: cams, pulleys, levers, gears. Design a decorative item that can be powered by wind.	Develop a design specification List the features required for a Viking house. Develop a design that features these. Decide on the size of decoration. Specify measurements and how the decoration will appeal to the chosen recipient.
	Planning and prototypes	Model their ideas in card and paper Investigate different shaped objects to test hull shape in water. Draw and label a design plan. Plan what will move and how. Make an example of what will be attached?	Develop their design ideas through discussion, observation , drawing and modelling Make simple drawings and label parts Draw a plan for how different sized boxes can be fixed together to create Tudor style house. Draw the additions they will make to the pre-made template to individualise for their chosen person. Label the materials (including threads) choosing the colours. Draw and list the tools.	Plan the order of their work before starting Explore, develop and communicate design proposals by modelling ideas Make drawings with labels when designing. Investigate how to strengthen card. Design a bridge using one or more of these strengthening techniques. Labels. Draw characters and label how they will be manipulated. Design scenery.	Make labelled drawings from different views showing specific features Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail Make a prototype of the magnetic element of the game (eg. fish with paperclip and magnet on the end of a string) or make a prototype of a game using electrical system (eg. operation, steady hand/dexterity game)	Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail Make a prototype vehicle where wheels will turn on an axle. How will wheels / axle be attached to the chassis? What alternative if this doesn't work? Test chosen mechanical system(s) in prototype. How will the power of the wind be captured and make something move? Generate more than one prototype and test.	Explore, develop and communicate aspects of their design proposals by modelling their ideas in a variety of ways Plan the order of their work, choosing appropriate materials, tools and techniques Create cross-sectional and exploded diagrams. Identify fabrics (design and shape) and stitching (colour and stitch type), numbering the sequence in which to attach.

Working with tools, equipment, materials and components to make quality products	Selecting tools and materials	Make their design using appropriate techniques Select from junk materials for best shape hull. Select paper type and colours.	Begin to select tools and materials; use vocab' to name and describe Select and collect boxes that will be suitable to use for the houses. Ask for fabrics, threads, tools / discuss work in progress using correct vocab. Group discussion about type of paper used and why.	Select tools and techniques for making their product Be aware of limited amounts of each material. Choose techniques for strengthening. Select paper type and investigate how to make cuts into the middle of paper.	Select appropriate tools and techniques for making their product Use pins, needle and thread to embellish – stitches (blanket stitch, running stitch), embroidery and applique. Sew on a button to enable hanging the stocking. Investigate magnetic fixings that could be used in the game.	Select appropriate materials, tools and techniques Use construction materials - measure and cut the wooden axles to the correct lengths. Design wheels to be of a suitable thickness. Select appropriate materials – collect. Choose tools needed. How can the wind-powered object be durable outside? What materials?	Select appropriate tools, materials, components and techniques Measure and cut several wooden pieces for the building frame. Test stitches chosen (running, back, blanket, cross-stitch, French knots).
	Shaping materials	With help measure, mark out, cut and shape a range of materials Use scissors to cut and folding to shape. Use scissors to cut – fold card and cut into fold or use a split pin to make the initial cut.	Measure, cut and score with some accuracy Disassemble boxes and reassemble in order that the plain inside is outside to aid finishing. Cut a slot with assistance to make the first incision. Cut slider accurately.	Measure, mark out, cut, score and assemble components with more accuracy Score card before folding, measure before cutting (scissors). Assemble combination of card and art straws. Draw and cut with accuracy. Attach mechanism for holding the puppet.	Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques Use a stick for a fishing rod, string tied on – children source these materials.	Measure and mark out accurately Measure and fold / cut the chassis to hold the axles and body of the car. Cut and construct framework for mechanism(s). Base the measurements on the tested prototype.	Measure and mark out accurately Measure and mark out the length to cut each wooden piece. Measure / cut fabric, allowing for hemming and attaching.

	Tools	Use tools eg scissors and a hole punch safely Use scissors and a hole punch. Use scissors.	Use hand tools safely and appropriately Use scissors for cutting. Model how and why to score before folding (Adult may use craft knife). Children score with a sharp tool, eg. pencil, using a ruler. Use needles (rounded point) safely. Use scissors to cut threads. Learn how to cut an incision safely.	Work safely and accurately with a range of simple tools Use scissors for cutting. Score using a craft knife and ruler (1:1 supervision). Use scissors, single hole punch.	Sew using a range of different stitches, weave and knit Sewing using different methods – different stitches, embroidery and applique. Attaching fabrics in different ways. Safety with needles and pins - supervision. Does the stick need cutting? (hack saw with a block - under supervision)	Use skills in using different tools and equipment safely and accurately Use a craft knife / hacksaw and bench hook safely (1:1 supervision), access to balloons and elastic bands as options for power. Craft knife for accuracy (1:1 supervision). Select tools and operate with awareness of safety (supervision).	Use tools safely and accurately Pin, sew and stitch materials together create a product Use glue gun / hacksaw and bench hook safely (small group supervision). Use needles and pins safely – see above.
	Assembly	Assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape Use different types of tape. Cut flaps at the end of cylinders to fan out in order to attach (funnel). Prit stick. Use prit stick, selotape or PVA glue. Use split pins.	Assemble, join and combine materials in order to make a product. Explore ways to make the structure stronger, stiffer and more stable. Cut, shape and join fabric to make a simple garment. Use basic sewing techniques Use PVA glue for strength, with awareness of holding in place to dry. Cut fabric to add to pre-made template. Use running stitch or back stitch to attach.	Think about their ideas as they make progress and be willing change things if this helps them improve their work Measure, tape or pin, cut and join materials with some accuracy Adapt ideas if they are not working during assembly. Join card and art straw using masking tape / selotape / glue. Attach handle for puppet without it affecting the shadow.	Join and combine materials and components accurately in temporary and permanent ways Measure, tape or pin, cut and join fabric with some accuracy Cut thread to appropriate lengths and secure ends effectively using a hidden knot. Tie string to attach using strong knot. Attach the magnetic and metal elements for a permanent solution.	Join and combine materials and components accurately in temporary and permanent ways Make modifications as they go along Use PVA, split pins, stapler, tape, string, glue gun (supervision) to attach components. Use PVA, split pins, stapler, tape, string, glue gun (supervision) to attach components. Test as assembling to ensure the fixtures are durable for outside use.	Assemble components make working models Construct products using permanent joining techniques Make modifications as they go along Use glue gun (small group supervision) to make permanent fixings – triangular corners for strength. Assemble by pinning fabrics prior to sewing.

	Finished product	Use simple finishing techniques to improve the appearance of their product Add details using a variety of decoration. Add details and decoration to enhance appearance.	Choose and use appropriate finishing techniques Paint / collage the house (painting enabled due to disassembly and reassembly on reverse side). Finish the slider card to a level suitable to be given to someone else.	Use finishing techniques. Strengthen and improve the appearance of their product using a range of equipment Test bridge for strength using weights. Strengthen further. Test the shadow made and make adjustments. Strengthen paper for larger puppets.	Use simple graphical communication techniques, including ICT Plan design of stitching.	Cut and join with accuracy to ensure a good-quality finish to the product Body work of vehicle should be aesthetically pleasing. Mechanism hidden, but toy is decorative / fun. Wind-powered object should be decorative (see initial brief)	Achieve a quality product House created is cube / cuboid in shape. Sew on / sew off with the ends of threads concealed.
Evaluating processes and products	Refer back to planning	Evaluate their product by discussing how well it works in relation to the purpose Score out of 10. Score out of 10.	Evaluate against their design criteria As a class, evaluate against criteria (eg. average score or written comment) Children write questions to ask the person for whom they made the puppet (some modelling).	Evaluate their product against original design criteria e.g. how well it meets its intended purpose Disassemble and evaluate familiar products Test each bridge against set criteria. Scoring system agreed.	Evaluate their work both during and at the end of the assignment Evaluate the aesthetics of their finished stocking – compare colours / pattern to original design. Make changes to initial plans as appropriate and record these alterations.	Evaluate a product against the original design specification Evaluate the final product by testing - criteria developed based on requirements (power / strength / aesthetics) Assess effectiveness of the mechanism(s). Put decorative wind-powered item in the school grounds. Monitor its durability over time.	Evaluate against their original criteria and suggest ways that their product could be improved Compare finished structure / original plan. Assess each feature intended to be included. Written evaluation. Market research
	Strengths and changes	Evaluate their products as they are developed, identifying strengths and possible changes they might make State what could be improved. State what could be improved.	Evaluate their products as they are developed, identifying strengths and possible changes they might make As 'street' is assembled, evaluate and adapt. Add more design features to improve aesthetics.	Evaluation from audience.			Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests Measure each side length. Assess as above. Full written evaluation. Market research.

	Questioning	Evaluate their product by asking questions about what they have made and how they have gone about it Feed back to peers. Ask for feedback from peers.	Talk about their ideas, saying what they like and dislike about them Share class evaluation (average score or written comment). Discuss the findings. Children report back their findings from asking their questions through whole class questions and discussion.	Evaluate their products carrying out appropriate tests Evaluate their product against given set of criteria using questions as a prompt. Write questions to ask their audience, particular to their puppets. Discuss how key individuals have helped shape the world – eg. IKBrunel, Eiffel, Clifton, TTelford.	Evaluate their products carrying out appropriate tests Does the finished product look aesthetically pleasing – would it be used as a Christmas decoration? Play the game and evaluate its effectiveness / fun.	Evaluate it personally and seek evaluation from others Class feedback given for vehicles based on requirements (power / strength / aesthetics) and write up evaluation. Plan a demonstration to children in other classes. Take questions in order to collect data. Market research – ask for feedback after being out for a week. Children design their own questions based on durability and decorative design. Discuss how key individuals and events have helped shape the world – Da Vinci, Edison, MAnderson, AGBell, TBerners-Lee. Events of lightbulb, telephone, internet.	Record their evaluations using drawings with labels Draw finished house and compare with cross-sectional / exploded diagram. Include photographs (front and back) – annotate the photograph to explain features.
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Cooking	Ingredients	Select and use appropriate fruit and vegetables, processes and tools Measuring, weighing, chopping, mixing, using a tin opener, grating, spreading. Food selection for own tastes.	Select and use appropriate fruit and vegetables, processes and tools Chopping, cutting, stirring, crushing, mixing, weighing, measuring, peeling, spreading. Food selection for own tastes.	Select and use appropriate fruit and vegetables, processes and tools Weighing / measuring, mixing, rubbing, rolling, cutting, sifting, grating, pouring.	Weigh and measure accurately (time, dry ingredients, liquids) Weighing/measuring, mixing, mashing, grating, melting, pouring, cutting, scrubbing, slicing, baking. Food selection based on food sources.	Weigh and measure accurately (time, dry ingredients, liquids) Grate, mix, knead, weighing/measuring, boil, chop / cut, pour, shape, stir, opening a tin, draining, slicing, rubbing, sprinkling. Food selected to shared tastes, seasonality and location.	Weigh and measure accurately (time, dry ingredients, liquids) Chopping, measuring, weighing, mixing, baking, breaking an egg, sieving, grating, kneading. Showing an awareness of seasonality, food sources.
	Food hygiene	Use basic food handling, hygienic practices and personal hygiene Hand washing, cleaning surfaces, safety with sharp objects (scissors, grater, tin opener).	Follow safe procedures for food safety and hygiene Hand washing, cleaning surfaces, safety with sharp objects (peeler), boiling water, grater, tin opener).	Demonstrate hygienic food preparation and storage Hand washing, cleaning surfaces, safety with sharp objects (grater, knives), allergy awareness (flour, milk).	Demonstrate hygienic food preparation and storage Hand washing, cleaning surfaces, safety with sharp objects (shape cutters, knives), allergy awareness (milk, flour)	Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens Hand washing, cleaning surfaces, safety with sharp objects (graters, peelers), allergy awareness (butter, flour), oven safety – cooking in the school kitchen.	Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens Hand washing, cleaning surfaces – following hygiene requirements more independently. Safety with sharp objects (graters, knives).
	Recipes	- Breakfast Fruit - Crunchy Bran Pots - Pitta Pizzas - Pasta Salad	- Garlic Bread - Couscous Salad - Berry Mess	- Shortbread shapes - Cheese Straws - Curried Tuna Pitta Bread	- Honey Roasted Vegetables - Banana Bread - Fruity Flapjack	- Tinned Fruit Crumble - Cheese and Sweetcorn Scones - Cheese and Veg Pasta Bake	- Bread - Fairy Cakes - Baked Onion Bhajis

Cooking

Project 1 full project

Project 2 full project

Project 3 any additional DT