Sandon Primary Academy - Design Technology

Year 6

Autumn Term	Spring Term	Summer Term	
Where we use a range of tools and equipment to design, make and evaluate our product.			
Theme: Food: Come dine with me	Theme: Food: Textiles: Waistcoats	Theme: Mechanical Systems: Automata toys	
Lesson 1: Research	Lesson 1: Evaluate existing products and identify a purpose Evaluate products and identify criteria that can be used for their own designs Disassemble and evaluate familiar products I can identify a purpose/target audience for waistcoats I can annotate my designs I can design clothing to a set of design criteria I can develop a design specification I can communicate my ideas through detailed labelled drawings Lesson 3: Sewing practice I can thread a needle I can use running stitch I can mark and cut fabric according to my design Lessons 4 & 5: Assemble and decorate a waistcoat I can sew a strong running stitch I can make sure my stitches and small, neat and follow the edge I can tie strong knots to secure the thread in place I can pin, sew and stitch materials together to create a product I can accure a fastening I can attach objects for decoration using thread I can achieve a quality product Lesson 5: Evaluation I can evaluate my work according to the design criteria I can thoroughly evaluate my design and final product, highlighting areas of success and give suggestions of how it can be developed	Key Objectives: Lesson 1: Evaluate existing products and use woodworking tools Investigate and analyse a range of existing products I can measure, mark and check the accuracy of the jelutong and dowel pieces I need to cut using the cutting list I know that saws have sharp teeth and can be dangerous if not used properly I can use a bench hook to saw safely and effectively I can measure and cut the card components I need accurately using a ruler and scissors Lesson 2: Assemble components to make a frame I can cut components from my cutting list I can cut accurately to ensure my frame functions effectively and I know the joints of my frame should be secured at right angles I can use a glue gun safely Lesson 3: Explore cams and design a window display I can carry out cam research to inform the design of my window display I can draw my final window display and annotate is based on my cam choices Lesson 4: Assemble a window display I can make and assemble a window display, focusing on the decorative elements I know that good quality products should be neat, accurate and securely assembled I can choose the correct glue according to the materials I am joining and the speed at which I need the glue to dry I can achieve a quality product Lesson 5: Evaluation I can evaluate my product using drawings with labels or photographs I can evaluate my automata toy, identifying strengths and areas for development and suggest ways in which it could be improved	
Key Vocabulary: nutritious ingredients healthy recipe calories carbohydrates vegan protein vegetarian equipment temperature design refrigerated sustainable hygiene design criteria/brief/specification heat/cool evaluate prepare diet Resources:	Key Vocabulary: design panels pattern fastening waistcoat sew purpose running/blanket stitch formal functional target audience/customer hidden seam unique assembling design criteria decorating annotate evaluate template Resources:	Key Vocabulary: automata cams: snail/drop cam, mechanical pear or egg shape/single rise, woodworking off-centre/eccentric motion follower components assemble axle Resources:	
Variety of cookbooks Paper plates Knives Variety of ingredients (tbc) Bowls Chopping boards	Chalk Buttons Felt for waistcoats- 2 pieces per child Beads Selection of threads Binca fabric for sewing practice – felt	Example automata toy (teacher made) Hand drills and drill bits of 3mm and 4mm Tenon saws and bench hooks 1cm x 1cm jelutong Glue gun/PVA glue Masking tape Magazines/Newspapers	

Cross-Curricular Links:

Autumn: Science: recognise the impact of diet and lifestyle on the way their bodies function. Pupils should learn how to keep their bodies healthy.

Spring: N/A

Summer: N/A

Enrichment:

Autumn: Use of the cookery room

Spring: N/A

Summer: N/A

Key DT Skills which can be revisited throughout other Subject Areas:

- Plan the order of their work, choosing appropriate materials, tools and techniques
- Select appropriate tools, materials, components and techniques
- Use tools safely and accurately
- Make modifications as they go along

National Curriculum: By the end of KS2, pupils will be able to:

Design

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design Make
- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

Evaluate

- investigate and analyse a range of existing products
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- understand how key events and individuals in design and technology have helped shape the world

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Pans	Needles	0.3cm dowel rod
Spoons	Tape measures	Engineers or set squares
Plastic cutlery	Pins	Thick and thin card