

**KS3 – Design & Technology** 

Year 8

Golden Threads Enrichment Review and Evaluation

	Topics & Substantive Knowledge	Disciplinary Knowledge	Assessment	Misconceptions	Key Vocabulary	Knowledge Tracking
Resistant Materials	Understand and recognise the Bauhaus style Understand the material categories of wood and metal Use CAD/CAM to create a mould Be able to Pewter cast Demonstrate a range of practical skills to make your packaging   Work of others Design strategies Using and working with materials Specialist techniques and processes.	Look at and review Bauhaus and highlight what its key styles and features are.  Using Bauhaus as inspiration produce a range of ideas for the pewter piece and box.  Know the 3 categories of metal and what the differences are.  Know the 3 categories of wood and what the differences are.  Be able to produce a complex mould using CAD / CAM  Understand the process of casting and what is required.  Understand how to finish a piece of pewter to a high quality.	End of unit test.  End of module Design & Make mark.  4 x Multiple choice question homework's	The difference between the material categories.  How long it takes to sand and finish a piece of pewter.  The gradients of sand / wet and dry paper.  The layers of the mould.	Acrylic Alloy Non-Ferrous Ferrous Mould Bauhaus Pewter Resistant Casting Thermoplastic	Building on previous knowledge from year 7:  Materials  Design strategies  Specialist processes  Leading to:  Producing a wide range of creative design ideas  More complex use of CAD / CAM  Being able to independently pewter cast



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Textiles	DESIGN: Research and exploration looking at existing products/ work of others.  Working with a context of producing a character cushion.  Generation of creative design ideas with the use of annotated sketches.  MAKE: Use of specialist tools, techniques and processes such as layered and 3D applique, use of the sewing machine, dyeing methods, hand embroidery, seams, hems and working with patterns and templates.  EVALUATE: Test and evaluate final product.  TECHNICAL SKILLS: understand the properties of materials eg Fibres and Fabrics, Resist dyeing methods and understanding allowances eg seam allowance.  The work of others  Design strategies  Communication of design ideas  Specialist techniques and processes  Surface treatments and finishes  Materials and their working properties  Specialist tools and equipment	DESIGN: The importance of analysing the work of others/ existing products using ACCESSFM.  How to produce a high-quality design solution eg design ideas, final design with the use of annotation.  MAKE: Using the appropriate tools and equipment for use on fabric.  Knowledge on changing the appearance of fabric using different dyeing methods.  Working with accuracy and precision on seams and hems.  Safe use of the sewing machine and textiles equipment.  EVALUATE: Looking at the positives and negatives of final outcomes. Self and peer assessment and reflection.  Methods to improve and modify.  TECHNICAL SKILLS: Natural and man-made fibre knowledge.  How to add natural and man-made colour and decoration to fabric.  The use of detailed plans to aid in manufacture.	End of module Design & Make mark.  4 x Multiple choice question homework's	Improper threading up of the sewing machine.  Improper use of the sewing machine and other tools/ equipment used in the textiles room.  How long it takes for fabric to dye successful.  Confusion between paper scissors and fabric shears.  The need for tacking stitches and not using pins when on the sewing machine.  Confusion between hems and seams.  The difference between the material categories Natural and Man-made fibres.  Understanding leather is not a fibre.	Seam Linen Tacking Cotton Applique Cushion Cover Mordant Embroidery Sewing Machine Tie Dyeing	Prior Learning:  Building on the knowledge acquired in Y7. Students will learn more advanced textiles techniques and processes including:  Dyeing, Layered Applique, adding 3D elements.  Future Learning:  The safe and accurate use of the sewing machine.  How to measure, cut and manipulate fabric.  How to decorate fabric using a wide variety of processes including CAD/CAM.  Introducing of environmental and sustainable textiles.



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Food	To develop food preparation and cooking skills.  To develop knowledge and understanding of nutrition and healthy eating principles.  Healthy eating guidelines Seasonal foods Sensory analysis Carbohydrate and staple foods Bread making Protein Protein and Sustainability Cooking with meat Nutritional and sensory functions of fat Vitamins, minerals and water Well balanced meal design	<ul> <li>Eatwell Guide (Rainbow Pasta Salad practical)</li> <li>5-a-day + fruit &amp; vegetables</li> <li>Pot Noodle product analysis</li> <li>Completion of a star diagram</li> <li>Sources and functions of carbohydrate (Risotto practical)</li> <li>Definition and examples of staple foods.</li> <li>Ingredients and techniques used to make bread (Naan bread practical)</li> <li>Sources and functions of protein (Chicken tikka masala practical)</li> <li>Environmental impact of protein, and more sustainable sources (Homemade beans practical)</li> <li>Planning an insect-based menu.</li> <li>Sources and functions of fats and sugar (Lemon drizzle cake practical)</li> <li>Reducing fat, sugar and salt content.</li> <li>Sources and functions of vitamins and minerals.</li> <li>Importance of hydration</li> <li>Application of Eatwell Guide knowledge to plan a well-balanced main meal.</li> </ul>	End of module Design & Make mark.  4 x Multiple choice question homework's	Difficulty identifying nutrients provided by foods.  Confusion between sections of the Eatwell Guide and names of nutrients.	Nutrients Vitamins Minerals Protein Function Carbohydrate Guidelines Sustainability Sensory Analysis Kneading	Building on knowledge and skills learnt in Year 7 Food.  Drawing upon elements of the GCSE Food Preparation and Nutrition specification.



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Graphics	Understand the term graphic products and design, and a basic history and development up to the present time.  Understand the use of typography, grid method, layout, use of templates, key graphic designers, pencil layout and appropriate use of CAD (Techsoft, Publisher), use of craft knives, laminator, industrial visit, digital printing.  Understand the range and uses of different papers and boards.  DESIGN  History of Graphic Design  Work of others  Examples of a wide range of applications  Sketching  Grid method  Typography  CAD  Use of electronic templates  Range of papers and boards  MAKING/TECHNICAL SKILLS-PROCESSES  Printing  Laminating  Die-cutting  Marking out  Cutting  Folding  Industrial visit  EVALUATION  Designer feedback  Client feedback	DESIGN Understand how Graphic Products/Design fits within DT.  Learn the time frame, work and influence of a diverse range of key graphic designers of the 20th and 21st century.  Understand the importance of creating a visual brand to ensure a product or service is successful.  Apply the grid method in order to create a memorable and creative company logo.  MAKING/TECHNICAL SKILLS-PROCESSES Safely use a range of industrial processes to manufacture a promotional gift box, invitation and promotional gift.  die cutting,  printing,  measuring,  marking out,  cutting,  Folding  Use of CAD software  Techsoft to create an individually designed company logo and external packaging.  Using Publisher to create a gift experience voucher/invitation.  Using pencil/ruler and craft knives to create internal packaging.	End of module Design & Make mark.  4 x Multiple choice question homework's	Understanding the impact of graphic design upon 21st century cultures, particularly with the use of electronic media.  Understanding the economic impact of graphic design on the UK economy particularly with regard to the creative design industries.  Correct use of a ruler and accurately marking out.  Understanding the difference between a company logo and branding of an individual gift experience.  Understanding creating a multilayered	Experience Scored Inspiration Duplex Corrugated Die cutting Digital printing Craft knife Promotional Personalised	