DESIGN TECHNOLOGY

A SELECTION OF SHORT FOCUSSED PRACTCAL TASKS AND REVISION IN PREP FOR FINAL NEA AND EXAM.

KS4

YEAR 11

FINAL GCSE EXAM

Core content and specialist knowledge: Revise and practice exam papers in preparation for your final exam in DT.

EXAM REVISION

Mock PPE

NEA COURSEWORK AND REVISION

AO3: EVALUATE Gain feedback throughout your project, and test your final product – have you met your brief?

AO4: CREATE Design ideas: Manufacture your product using skills and processes used throughout your DT journey.

AO2: Design thinking Develop and communicate ideas. Developing them using modelling techniques/ Rapid prototyping.

Mock PPE

AO1: Design thinking: Clarify the needs and wants of the project writing your own context, brief & specification Develop starting ideas.

AO1: EXPLORE Understand the context. Client interviews, product, site analysis and designer research.

START FINAL NEA

Mock PPE

FOCUSED PRACTICAL TASK AND REVISION PORTFOLIO

Make: Working to tolerance and scale. Using a wide range of tools and processes to produce your final product.

Initial Concept Sketches: What ideas do you have already? Do they have scope for development.

YEAR 10

Make: Use a wide range folding and cutting techniques to form table and chair.

Evaluate: Your products and attitude to learning while working as a team.

Design: Working collaboratively to make a flat packed chair and table.

Materials: Working with corrugated cardboard Origin and classification of cards and boards.

CARDBOARD FURNITURE PROJECT

End of year Assessment: What do you now know about DT? Are you retaining knowledge over the last 3 years?

Make: Use a wide range of skills, materials and processes to develop your unique product.

Design: Focus your idea on the Pop-Art design movement as inspiration.

Materials: Working with manufactured boards Widening knowledge of hand and CAD/CAM to help enhance aesthetics.

Testing / Modelling: Will my product work? What can I do to improve it?

POP ART SPEAKER PROJECT

Midway Assessment: What do you now know about DT? Are you retaining knowledge?

Materials / Make: Use materials you have not combined before such as resin, acrylic and timber to develop a unique stylized product.

Design: Reference key design movements top to develop a stylish functional product.

Evaluate: What skills have you developed? Test your product and consider how you would improve it.

MEMPHIS CAD/CAM CLOCK

Mock PPE

Evaluate: What skills have you developed? What tests can we undertake to ensure a high quality product.

Make: Using CAD/CAM to make an accurate mould. Using the brazing health to melt metal into liquid form. Learning how to cut, smooth and buff surfaces when working with metals.

TRINKET BOX PRACTICE NEA

Investigate the design possibilities: What is the design context? What research can you carry out to gather ideas?.

Design: Developing design drawing skills, orthographic projection.

Materials: Working with PEWTER Origin and classification of ferrous/non ferrous metal and alloys.

PEWTER JEWELLERY PROJECT

9

Year 10 - 11 After choosing options in year 9, focus your studies in GCSE DT in years 10 -11, through exciting, real life projects. Deepen your understanding of DT in the world around us whilst developing products that help various needs and users.

Design: Isometric projection, CAD development

Materials: Paper/card Stock form, sizes, recycling

Make: Can you make an accurate product using machines and tools independently?

Evaluate: What skills have you developed? Test your product and consider how you would improve it.

Materials: Plastic – ACRYLIC manufacturing processes, SUSTAINABILITY.

HEAD PHONE WRAP PROJECT

Midway Assessment: What do you now know about DT? Are you retaining knowledge?

Design: Orthographic projection, CAD design development

Make: Can you make an accurate product using machines and tools independently ?

Evaluate: What skills have you developed? Test your product and consider how you would improve it?

End of year Assessment: What do you now know about DT Did you retain the years knowledge?

POP-UP BOOK PROJECT

Evaluate: At each stage of making, how can you improve your product? Would you change any thing?

Make: Develop independence in CAD using Adobe illustrator software to manipulate/make complex fonts. Heat transfer.

Design: Designing for a user and client. 1/2 point perspective Manipulating/design own fonts.

Materials: Paper/card origin , classification, uses.

BURGER BAR PROJECT

Year 9 Work in more depth on projects, honing your practical skills, improving your resilience & problem solving whilst developing independence in the workshop.

YEAR 8

Design: Designing with restrictions/tolerances Orthographic Projection & Rendering.

Make: Sewing drivers license Basic machine and hand stitching skills Applique.

Evaluate: Does your product work? How well is it made? How did/can you fix problems?

Materials: Plastic – ACRYLIC Stock form, manufacturing processes.

Design: CAD What is computer aided design? Learn to use the basics of 2D software to design products.

Make: What is CAM? Use the laser cutter to produce your final product!

Evaluate: How has CAD/ CAM helped you make a product?

CAD/CAM KEYRING PROJECT

Materials: fabrics classification and construction.

FAST FOOD CUSHIONS

Midway Assessment: What do you now know about DT? Are you retaining knowledge?

End of year Assessment: What do you now know about DT? Are you retaining knowledge?

Year 7 – 8 Experience a wide range of fun and exciting projects that teach you valuable skills in the workshop, understanding different materials and how they work.

YEAR 7

Evaluate: What makes a good design? How can you improve your skills?

Make: Plastic manipulation Shaping manufactured boards Use of hand tools and Vacuum former.

Design: Designing for users Isometric projection Communication of design ideas CAD design development.

Materials: Plastics – HIPS origin , classification , uses.

CHOCOLATE BAR PROJECT

Introduction to the workshop: Health and Safety.

Baseline Assessment: What do you already know about DT?

KS3