

DESIGN & TECHNOLOGY

NEA is a large, in depth research, design, make and evaluate project. It is worth 50% of the GCSE. It is started in the summer term when AQA release the contexts and given in for marking at Easter the latest.

AO2: Generate & Develop Design Ideas:
Develop your sketches and communicate ideas. Developing them using modelling techniques. Keep making constant improvements – iterative design. Make final prototype of the highest quality showing many skills

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

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

FINAL GCSE EXAM

EXAM REVISION

NEA COURSEWORK

YEAR 11

Discover & Design:
Designing for children. How do we make a product fun and safe?

Materials:
What materials will be appropriate for your product? What materials are sustainable?

Theory:
Found in each project but sometimes taught separately to projects

Testing / Modelling:
Use various testing and modelling methods to develop your product

Make:
Use a wide range of tools and processes to produce your final product. You decide!

Design:
Reference key designers, RM students for a short project Architects for Graphics students for an in depth project

Explore and discover:
For RM students. Using different methods to design and make pewter jewellery and how to anneal aluminium to avoid metal fatigue.

AO1: Research & investigation
Identify, investigate & outline design possibilities
Produce a design brief and specification

KS4

MECHANISMS PROJECT

Cams / motions & movements:
What do cams do? How do they work?

THEORY

ARCHITECTURE PROJECT or DESIGN MOVEMENT

METAL WORK PROJECTS

GCSE NEA CONTEXTS

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

Design:
Focus your idea on the work of famous designers, use architecture or product design as inspiration.

Evaluate:
What works? What can be taken forwards to be developed?

Explore techniques & Design:
Develop Isometric Projection and rendering skills using CAD

YEAR 10

ACRYLIC JEWELLERY PROJECT

MODEL MAKING PROJECT

INTERIOR DESIGN SHOP PROJECT

PHONE STAND PROJECT

Make:
Learn additional processes & wood joints. Using skills to develop high quality marketable products.

CAD/CAM Design & Make:
Polish your skills and make a marketable product.

Discover:
Materials have very different properties

Design and develop:
Will my product work? What can I do to improve it? Use prototypes to test and improve

Make:
Can you make an accurate product using machines and tools independently, using templates as they do in the world of work

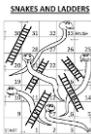
Evaluate:
What skills have you developed? Test your product and consider how you would improve it.

Materials:
Working with softwood and manufactured board.

Materials:
What materials would be best for different parts of your activity pack?

Test & Evaluate:
At each stage of making, how can you improve your product? Would you change anything? Play some of the games you have designed. Are they fun?

4 PIECE PUZZLE TANGRAM PROJECT



Make:
Develop independence in CAD using 2D design software to make complex design ideas. Or develop your ideas by hand.

Design:
Designing for a user, young children. This project really helps you think about a target audience and their needs. Just like a designer would in the world of work.

Discover:
What products already exist and what do think about them

KS3

YEAR 9

ACTIVITY PACK PROJECT

Work in more depth on projects, honing your practical skills, improving your designing whilst developing independence. Design for a specific group.

Challenge:
Use your structures knowledge to play Cargo Bridge and see what level you get to in this fiendishly hard game

Discover:
Paper engineering and paper and card mechanisms

Design:
Design your own characters for a target audience

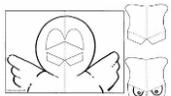


Experiment:
Try different ideas and different movements.

Evaluate:
Have you made something that would appeal to your target audience?

YEAR 8

STRUCTURES PROJECT



Discover:
How do structures help us every day?

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

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



Design: CAD
That is computer aided design? Learn to use the isics of 2D software to design products

Introduction to the workshop:
Health and Safety
Basic hand tool use and understanding what materials we use

KS3

YEAR 7

H&S HAND TOOL USE



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

