DT: PRODUCT DESIGN





SKILLS

The future -Study design in further education -Work as an apprentice in industry -Pursue an exciting career in the design/engineering world such as; film props designer maker, engineering, interior designer, jewellery designer and many more Testing and evaluation is A final product is made from

NEA AO4

KNOWLEDGE



-NEA coursework. Research, investigation, writing a brief and specification. Followed by the iterative design process, practical work and evaluation. (50%)

-Revision for the exam (50%)

Year 9

-Using sustainable materials within designing and making

-Creating a professional
portfolio

-Learning to use the
iterative design process to independently creating
individual outcomes
-In depth knowledge of
timbers and polymers timbers and polymers
-Applying ergonomics and anthropometrics to design

Year 8

-Measuring and cutting materials accurately by hand -Learning how to read orthographic drawings -Using power tools within the workshop

-Using renewable energy to

create working projects

-Soldering techniques

Year 7

-Understanding the basics of CAD/CAM -Exploring new and emerging technology Working with materials such as polymer and pewter -Learning oblique 3d drawing techniques -Applying finishing techniques

completed on the final product chosen materials and the making process

> The iterative design process is used to develop an outcome that is suitable for the chosen

brief and specification,in response to their own market research

Students create their own design

NEA AO1

NEA AO2

A textiles unit that prepares students for exam content and provides them with an apron to use during their NEA practical work

Students get chance to proactive the first pages of the NEA ready for the launch on June 1 st

for the final exam

high quality, well developed storage box to meet the needs, wants and interest of their target market



Students use the iterative design process to create a

Combining hand tools and CAD/CAM to create an aesthetically pleasing Table tennis bat that is ergonomically designed using anthropometrics

Table Tennis Bat

Exploring polymers and how to shape them

Applying CAD skills and the

iterative design process to

create scale models of slot

Slot Furniture

furniture

Learning how to be a more sustainable designer while making a lamp for yourself or your client

Sustainable Lamp

Studying design movements throughout the ages, students will use the knowledge and put their skills to the test to create a door sign using CAD/CAM and workshop skills.

Wood Joints

Creating several professional wood joints to join a simple MDF box

Market research

surrounding the three contexts given by the exam board

Design and make a solar powered boat using modelling materials, the vacuum former and electronics - this is tested in the sunshine!

Solar Boat

Memphis Door Sign

Using traditional workshop skills and power tools, students



Tilting Mirror





Looking at anime art, students design and make their own polymer ruler using the laser cutter

Students work with CAD CAM to design and make a pewter keyring

Polymer Ruler **Pewter Keyring**



Year 7 have one term each of: -Product Design -Textiles -Food

This will be done on a rotation throughout the year - one term for each discipline