

Design & Technology

Module 1

Topic Title: Core technical principles - new and emerging technologies

Brief Summary of Content Studied: Students investigate ethical issues surrounding large companies such as Dyson, Coca Cola and Primark in relation to the responsibility of the designer/maker. Product study used to focus on these areas (Dyson, Coca cola, Primark).

Knowledge Organiser:

<https://docs.google.com/presentation/d/1TYTosKPxDJmfmAHLoqvVTAmYlyDliYxMtod55kIO3Wg/edit?usp=sharing>

Module 2

Topic Title: Core technical principles - materials and their working properties

Brief Summary of Content Studied: Example NEA style project - Project 1 MP3 docking station/storage.

Introducing the idea of iterative thinking.

Focusing on Timber using other materials (polymers/ metals) as embellishments/ add ons

Knowledge Organiser:

<https://docs.google.com/presentation/d/1TYTosKPxDJmfmAHLoqvVTAmYlyDliYxMtod55kIO3Wg/edit?usp=sharing>

Module 3

Topic Title: Specialist technical principles - common technical principles

Brief Summary of Content Studied: Timbers- Use a range of appropriate tools and equipment to shape, fabricate construct and assemble.

Students try a range of techniques through mini practical sessions.

Practical experimentation with material. Testing materials to understand how they can resist/withstand forces applied to them.

Knowledge Organiser:

<https://docs.google.com/presentation/d/1TYTosKPxDJmfmAHLoqvVTAmYlyDliYxMtod55kIO3Wg/edit?usp=sharing>

Design & Technology

Module 4

Topic Title: Designing and making principles

Brief Summary of Content Studied:

Example NEA style project– Project 2 (lighting).
Building iteration into a project in preparation for the NEA
Investigate, analyse and evaluate the work of past and present designers/ companies
Using primary and secondary data to understand client and/or user needs.
Market research, interviews, human factors
Generating imaginative and creative designs

Knowledge Organiser:

<https://docs.google.com/presentation/d/1TYTosKPxDJjmfAHLoqvVTAmYlyDliYxMtod55kIO3Wg/edit?usp=sharing>

Module 5

Topic Title: Specialist technical principles - polymer based materials

Brief Summary of Content Studied: Polymers- Use a range of appropriate tools and equipment to shape, fabricate construct and assemble.
Students try a range of techniques through mini practical sessions.
Practical experimentation with material. Testing materials to understand how they can resist/withstand forces applied to them.

Knowledge Organiser:

<https://docs.google.com/presentation/d/1TYTosKPxDJjmfAHLoqvVTAmYlyDliYxMtod55kIO3Wg/edit?usp=sharing>

Module 6

Topic Title: Designing and making principles
NEA

Brief Summary of Content Studied: Iterative process so the learning activities will be directed by the student and will depend on their project
Unpacking the design brief (given by the exam board June 1st)
Understanding how primary and secondary data can be collected to assist the Understanding of the client and user needs
Know how to investigate, analyse and evaluate the work of others

Knowledge Organiser:

<https://docs.google.com/presentation/d/1TYTosKPxDJjmfAHLoqvVTAmYlyDliYxMtod55kIO3Wg/edit?usp=sharing>