Haberdashers' Abraham Darby
Year 10 Technology Learning Journey

Exam preparation | This way to year 11

Exam Preparation
Use your revision lists and revision sheets, to help remember Powerful Knowledge and commit key information to long term memory.
You will be tested on all the content learned over the course of the year ready to build on in Year 11.

Maths | **NEA Preparation** | Maths

Introduction to section A of NEA:
Identifying and investigating design possibilities.

Mathematical areas of focus:
1.Arithmetic and numerical computation
2.Handling data
3.Graphs
4.Geometry and trigonometry

Scientific areas of focus:
5.Use scientific vocabulary, terminology and definitions
6.Life cycle assessment and recycling
7.Using materials

Summer Term 2 - NEA preparation

Natural woods and manufactured boards, Thermoset & Thermoplastics, Ferrous and Non-Ferrous metals

Materials

Summer Term 1
Materials

Section 7)
What are the functions of mechanical devices that produce different sorts of movement and that change the magnitude and direction of forces?
Input-process-output
Amplification includes : Types of movement, Mechanical systems, Lever & Linkages, CAMS & Followers, Gears, Belt drives, Rack & Pinion)

Spring Term 2
Mechanical components & devices

Mechanical components & devices

Section 5)
How do electronic systems provide functionality to products and processes, including sensors and control devices to respond to a variety of inputs and devices to produce a range of outputs?
Section 6)
What are the use(s) of programmable components that embed functionality into products in order to enhance and customise their operation?

Electronic systems & programmable components

Spring Term 1
Electronic systems & programmable components

Section 4)
a) What are the developments in modern and smart materials?
b) What are the developments made with composite materials?
c) What are the developments made in technical textiles?

Smart materials, Composites & Technical textiles

Autumn Term 2
Smart materials, Composites and technical textiles

Section 1) What are the impacts of new and emerging technologies on: industry, enterprise, sustainability, people, culture, society, the environment, production techniques, and systems.
Section 2) How does critical evaluation of new and emerging technologies inform design decisions?
Section 3) How is energy generated and stored in order to choose and use appropriate sources to make products and to power systems?

Autumn Term 1 - Design and Technology in the 21st Century – Design & Technology & our world.

Design & Technology & our world

KS4 – Y10

Students will build upon a knowledge of a range of material (metals, wood, plastics, composite and smart materials, paper/board and textiles) from previous years. They will also further their knowledge of Electronics, CAD/CAM, drawing, structures, mechanisms and emerging technologies.

Start here