Y9 and Y10 DT Assessments

Year 9 topics:

- Communication of design ideas drawing techniques: one-point and two-point perspective, oblique, isometric, orthographic and exploded diagrams
- CAD/CAM
- Prototype modelling
- · Existing product research, primary and secondary research
- Design brief, design specification and ACCESSFMM
- Material sources and origins, properties, stock forms, surface treatments and finishes: timbers and manufactured boards, paper and boards, metals and alloys, polymers and plastics and textiles
- Workshop tools, equipment and health & safety
- At least one industrial process

Year 10 topics:

- Renewable and non-renewable energy sources
- Composite materials
- Co-operatives, crowd-funding, fair trade, virtual marketing
- Portable energy storage systems
- Programmable microcontrollers
- Planned obsolescence
- Mechanisms gears, linkages, mechanical movements
- Materials and their working properties
- 6Rs of sustainability
- Surface treatments and finishes
- Industrial processes
- Production aids patterns, templates and jigs
- Designing and making principles
- Why designers research existing products
- How modelling is used to develop a product
- Ergonomics
- The work of one famous designer
- Calculating a percentage of something, calculating the height of a triangle when given the base measurement and angle (trigonometry or drawing technique)

List of revision resources and links:

AQA Key vocabulary:

 $\underline{www.aqa.org.uk/resources/design-and-technology/gcse/design-and-technology/teach/subjec} \\ \underline{t-specific-vocabulary}$

Focus eLearning: www.focuselearning.co.uk
Username & Password available on your Google Classroom.

Technology Student: <u>www.technologystudent.com</u>

BBC Bitesize: GCSE Design and Technology - AQA

BBC iPlayer Inside the factory (industrial processes): https://www.bbc.co.uk/iplayer/episodes/b07mddgk/inside-the-factory

YouTube (industrial processes): https://www.youtube.com/