

## Year 9 – Design Technology

### What will be studied?

#### Topic(s)

#### Design Technology

**Autumn Term:** Electronics: designing and making a mini desk Fan

Computer aided designing, Design movements, systems approach, Input devices, Output devices, Components, Soldering technique, Shaping polymer, Vacuum forming, Circuit diagrams, Testing and Evaluating final outcome.

**Winter Term:** Sustainable solutions

6 R's of sustainability, Anthropometric data, scale and proportion, designing ideas, joints and connecting methods, card modelling, Working drawings, Testing and Evaluating final outcome.

**Spring Term:** Ergonomics: Home organiser

Works of design company, Product analysis, aesthetic, functionality, ergonomic design, strip heater, line bending, smart materials, computer aided designing.

#### How do you assess the learning?

During the practical tasks, students are assessed on their skills and completion of the core tasks. In addition to these Self and Peer assessments, verbal feedback from the teacher and regular home learning tasks are planned throughout the unit.

### End of Year Examination

#### How will I be assessed at the end of the year?

Students are assessed based on their final outcome product and on presentation of their work in books and online tasks.

Additionally Students will be assessed on their attitude to learning using the practical subject ACS level descriptors ASSURED, SECURE, DEVELOPING and EMERGING.

### How can I help my child?

#### Guidance and advice

#### Product Design:

- Encourage visits to Design Museums as this can inspire your child creatively.  
The Design Museum Kensington  
<https://designmuseum.org/>  
V&A Design Museum  
<https://www.vam.ac.uk/>  
Exhibitions eg. NEC Birmingham/ Olympia & Earls Court London.
- Encourage your child to try assembling any DIY furniture.
- There are plenty of design programmes that your child can gain inspiration from.  
<https://www.bbc.co.uk/programmes/m000jk7p>

Grand Designs

<https://www.channel4.com/programmes/grand-designs>

How it's made

<https://www.youtube.com/watch?v=jDrn5orS9oo>

How to make BBC iplayer series

<https://www.bbc.co.uk/iplayer/episode/m000gwzd/how-to-make-series-1-1-the-trainer>

- Encourage your child to practice sketching  
[https://www.youtube.com/watch?v=c\\_NRuzPs9R8](https://www.youtube.com/watch?v=c_NRuzPs9R8)  
<https://www.youtube.com/watch?v=laPwhWbj77o>  
<https://www.youtube.com/watch?v=bjEw-mulcjA>
  - For revising topics  
<https://www.bbc.co.uk/bitesize/examspecs/zby2bdm>  
(Design technology area)
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