



Subject: GCSE Electronics

Head of Subject: J Sandbach

Year: Nine

Organisation of the Subject

Technology is taught in mixed form groups of up to 20 students. The students have 3 lessons per 2 weeks. Students will complete 4 modules throughout the year, working in the medium of electronics, graphics and wood, food and textiles.

Key Concepts (The big ideas underpinning the subject)

- Electronics Theory and Product Design Theory
- Developing Ideas
- Planning
- Communicating Ideas
- Producing Quality Products
- Evaluating Processes and Products

Key 'Learning Capacities' in this subject

- Interdependence, Collaboration, Listening and empathy, Learning from others
- Self-control, Perseverance, Absorption, Capitalising
- Planning, Revising, Keeping Track, Responsible risks.
- Applying past knowledge, Imagining, Think rigorously, methodically thinking, noticing, Distilling, Questioning, Meta Learning

What will your daughter be learning?

- Electronic Theory related to Timer circuits,
- Product Design Theory related to CAD/CAM and wood
- Analysis of Design Problems in order to produce Specifications
- Planning for manufacture
- Communicating ideas using annotated sketches
- Using modelling techniques to explore and develop ideas
- Understanding of a range of manufacturing skills and techniques
- Evaluation of products, processes and personal ability

How will your daughter be learning?

- Through working independently on whole design and make projects and small focused practical tasks
- Through working in pairs exploring ideas and possibilities using computers
- Through working in small groups to discuss their ideas and the ideas of others
- By modelling ideas to explore opportunities
- Evaluation of ideas, models, process and materials

How will learning be assessed?

All work in Key stage 3 is assessed according to the sub-skills as outlined in the Key Concepts in each workbook. Pupils' work is levelled as either developing, secure or high

What can you do to support your daughter?

Regularly reviewing their Booklet. Also using the VLE – Electronics and Product Design area and the websites given in the work booklet.

Equipment needed for this subject

Students will be given a Year 9 Booklet for each module.
The usual pens/pencils. Also rulers, coloured pencils, compass, memory stick.
Occasionally pupils may wish to bring in additional materials to personalise products.

Extra-Curricular / Enrichment Opportunities

Yr9 Go4Set Competition (This will commence during the spring term, it involves one evening per week + one lunchtime. Further information will be given at the appropriate time.)

If you have any questions about this Learning Overview, please contact your daughter's subject teacher in the first instance.