

Curriculum on a Page

Term One

What we will be learning (Subject knowledge)

Engineering disciplines.

Health and safety legislation including health & safety at Work Act.

SI Units used in engineering

Application of formula and calculations

Further application of engineering drawings.

How we will be learning (Learning approaches including Learning Habits)

- Focus practical tasks and investigation
- Group research and practical tasks-Outdoor living, stove product.
- Home learning tasks relating to core knowledge and understanding, & mathematical applications.

Try This at home

Using this website to investigate the world of engineering, and health and safety-

<http://www.tomorrowsengineers.org.uk/>

<http://www.hse.gov.uk/legislation/hswa.htm>

Term Two

What we will be learning (Subject knowledge)

- Engineering principles, processes and techniques.
- Materials-properties and characteristics.
- Mathematics for engineers-application of formula, equations and calculations (equations for properties).

How we will be learning (Learning approaches including Learning Habits)

- Examining exemplar materials.
- Practical investigations and production of an engineered product 2: Bike light
- Peer and self-assessment of the work.
- Target driven teacher reviews.

Try This at home

Check out one of the greatest engineers of our time-

<http://www.engineering.com/Library/ArticlesPage/tabid/85/ArticleID/34/Leonardo-da-Vinci.aspx>

<http://www.geniusstuff.com/blog/list/10-leonardo-da-vinci-inventions/>

Term Three

What we will be learning (Subject knowledge)

- Properties and characteristics of materials continued.
- Mathematics for engineers-application of formula, equations and calculations (equations for properties) continued.
- What an externally set synoptic project looks like and how it is assessed?

How we will be learning (Learning approaches including Learning Habits)

- Investigating examples of externally assessment synoptic projects.
- Peer and self-assessment of the controlled assessment work.
- Through practical engineering projects (bike light conclusion).
- Home learning tasks relating to core knowledge and understanding.
- Mock exam question sessions.

Try This at home:

What happens when it all goes wrong?

<http://listverse.com/2007/12/04/top-10-worst-engineering-disasters/>