Foxford Learning Plan

YEAR: 12

Topic: Materials and Components

Spring Term

Key Vocabulary

Manufactured Board	Flat, stable timber-based boards that are manmade, often using offcuts or waste materials.
Properties	The working characteristics of a material, e.g. flexible, easy to paint.
Composite	A material made from other materials form different classifications, e.g. carbon fibre.
Ferrous Metals	A metal that contains iron, is magnetic and will rust.
Non-Ferrous Metals	A metal that contains no iron, is not magnetic and does not rust.
Alloys	A mixture of two or more metals.
Hardwood	Timber that comes from a deciduous tree (one that loses its leaves in the winter).
Softwood	Timber that comes from a coniferous tree (one that is evergreen i.e. it does not lose its leaves).
Thermopolymer	A plastic that can be reheated and reformed.
Thermoset Polymer	A plastic that cannot be reheated and reshaped.

Key Skills

Over the course of the topic, I will be able to: -
Analyse different materials and know their working properties.
Justify why different materials are used for different products.
Explain the different classifications of different materials, and give examples.
Identify materials suitable for a particular task and justify the choice.
Use highly technical language and specific working properties when discussing materials and material selection.



I will understand:

1. That different materials are developed to meet a particular need.
2. That new materials are being developed constantly.
3. The properties, advantages and disadvantages of a wide range of materials.
4. The environmental impact of using different materials.
5. That designers will test and analyse different materials before making a final decision.