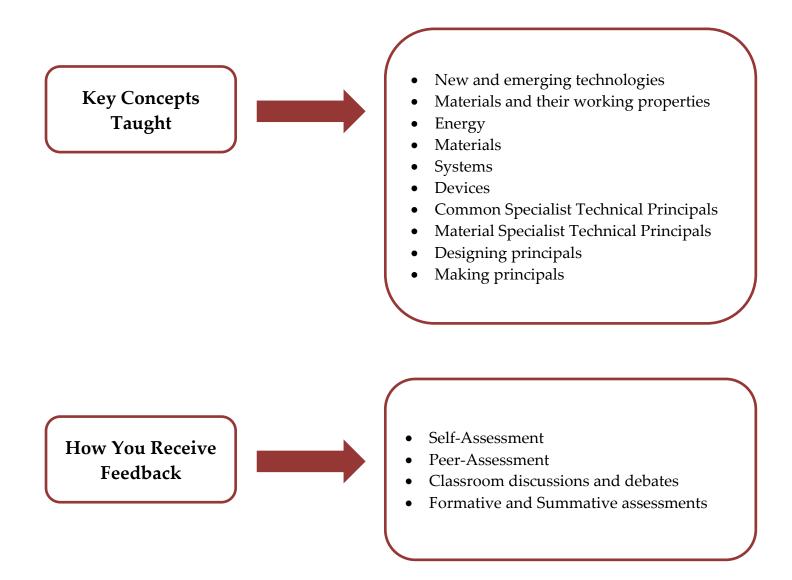


Curriculum Implementation – Design and Technology Key Stage 4







Marlborough Science Academy

How do Lessons Link to Key Concepts

- Demonstrate a high level of comprehension relating to materials and their properties.
- Utilise a wide range of skills including graphical, ideation, investigatory, practical, analytic to solve given contextual challenges and problems.
- Develop and demonstrate empathy through empathetic design and designers' impact on people, culture, society, and the environment.
- Understand and demonstrate good, safe practise when using a wide range of tools and machinery.
- Differentiate between the previous generations of designers and their legacies and justify how their design philosophy links to each of them.
- Effectively communicate design ideas and solutions in a way accessible to as many different individuals as possible.
- Show competency in their ability to use and adapt new and emerging technologies to solve problems relevant to the modern day and age.

How we get Support with our Lessons



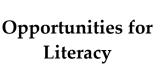
- Scaffolding
- Structured notes
- Design starters
- Higher and lower cognitive questioning





Retrieval Practice Opportunities / Supporting Ways to Help us Remember

- Create individual knowledge organisers.
- Assessment for Learning questioning.
- Documenting lesson key words and conclusions.
- Open book assessments.



- Students will develop their vocabulary through the introduction and usage of technical phrases.
- Students will make use of annotations to aid in the communication of ideas and sketches.

Opportunities for Numeracy



- Students will use numeracy to solve a variety of real-life problems such as determining forces, mass, angles, cost, and dimensions.
- Students will use a variety of mathematic formulas and concepts to do this.
- Provides a more accurate application for arithmetic.

Opportunities for Oracy



- Present and communicate design ideas through verbal and graphical communication lessons.
- Develop confidence in speaking through group presentations and group work.
- Interviewing clients.









