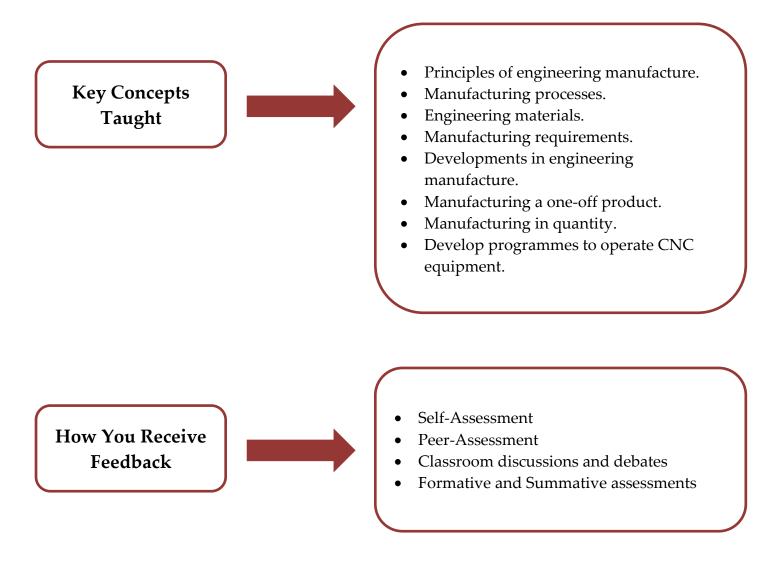


## **Curriculum Implementation – Engineering** Key Stage 4







Marlborough Science Academy

How do Lessons Link to Key Concepts

- Understand and apply the fundamental principles and concepts of Engineering Manufacture, including manufacturing processes, engineering materials, manufacturing requirements and developments in engineering manufacture.
- Develop learning and practical skills that can be applied to real-life contexts and work situations.
- Think creatively, innovatively, analytically, logically, and critically.
- Develop independence and confidence in using skills that would be relevant to the engineering, manufacturing, process, and control sector and
- more widely.
- Plan manufacturing production through practical experience of manufacturing for one-off products and manufacturing in quantity.
- Determine the sequence of operations required, recognising hazards and risks so that these can be controlled.

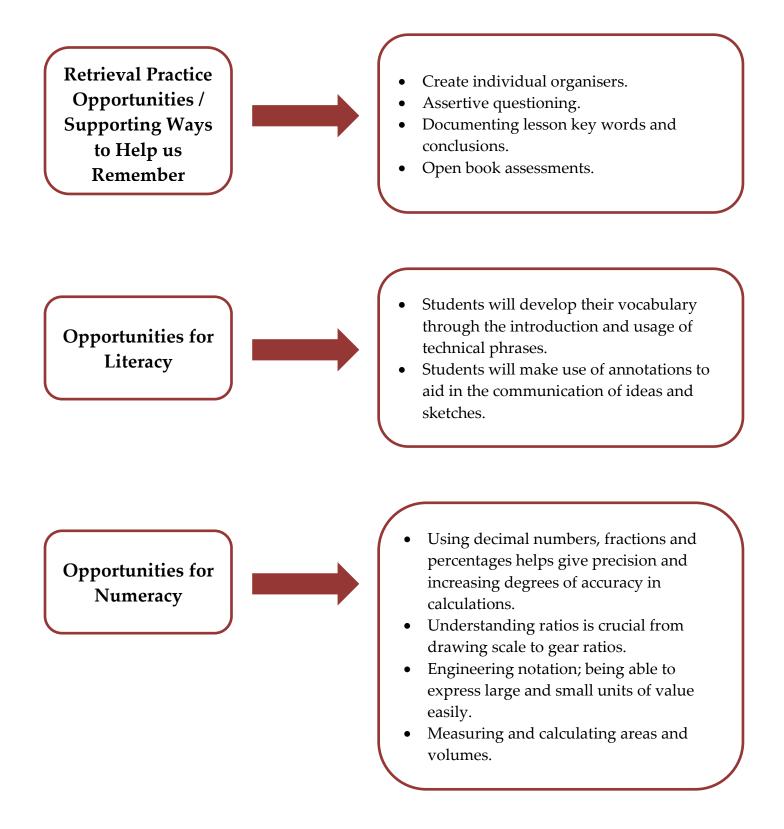
How we get Support with our Lessons



- Scaffolding
- Structured notes
- Design starters
- Blooms cognitive questioning

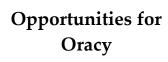








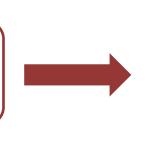




- Present and communicate Engineering drawings through verbal and graphical communication lessons.
- Develop confidence in speaking through group presentations and group work.
- Interviewing clients.

Opportunities for Character Education • Working with groups and with people in the wider community to solve specific problems, demonstrating, teamwork and ability to display empathy.

Opportunities for SMSC



 Students will tackle ethical questions surrounding the development of technology and its impact on people, culture and society as well as recognising the impact modern industry has on individuals economic and social footprints.

Opportunities for Assessing Learning



- Linking learning what we did last lesson, this lesson and next lesson.
- Plenaries to reflect on learning.
- Quizzes
- End of unit assessments.

