

Parkside School Curriculum Map 2025/6

Art, Design & Technology: Engineering

Year 11					
Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
Solving Engineering problems & Designing Engineering products Purpose: To become confident in the designing aspect of Engineering. To understand the function of engineering products and the components involved.	Solving Engineering problems & Designing Engineering products Purpose: To become confident in the designing aspect of Engineering. To understand the function of engineering products and the components involved.	Solving Engineering problems & Designing Engineering products Purpose: To complete and hand in Unit 2 coursework. Students will be nearing completing their design unit (20% of their final grade).	Solving Engineering problems Purpose: • To prepare for the Unit 3 exam. Students will recall knowledge from over the course and become confident at answering exam style questions.	Solving Engineering problems Purpose: • To prepare for the Unit 3 exam. Students will recall knowledge from over the course and become confident at answering exam style questions.	Students will be sitting their External GCSE Exams during this Half Term.
Students will be starting their Unit 2 coursework that follows on from Unit 1. They will re-design the product they intended to make. To do this they will need to understand how the product functions and what components are used together in order for it to function the way that it does. There will be a lot of technical drawing within this	Students will be starting their Unit 2 coursework that follows on from Unit 1. They will re-design the product they intended to make. To do this they will need to understand how the product functions and what components are used together in order for it to function the way that it does. There will be a lot of technical drawing within this	Students will be beginning to recap and revise previously learnt knowledge and learning how to read and respond to exam style questions. Students will begin preparing for their exams. Overview of the knowledge and skills covered in this unit: Modelling and prototypes Suitable materials for	Students will learn how to apply their knowledge and skills to real products manufactured and designed by engineers Overview of the knowledge and skills covered in this unit: Material properties Manufacturing process' Environmental issues Destructive and non destructive testing	Students will learn how to apply their knowledge and skills to real products manufactured and designed by engineers. Overview of the knowledge and skills covered in this unit: Velocity ratio (gears and pulleys) Mechanical Advantage Volume Area	



Parkside School Curriculum Map 2025/6

Art, Design & Technology: Engineering

unit so it's important students become confident at the design side of engineering.

Overview of the knowledge and skills covered in this unit:

- Orthographic drawing and section views
- Mechanical components
- Destructive and non destructive testing
- Product analysis
- How engineered products function
- Technical drawings for design skills (Isometric)

How will this be assessed?

- Aiming towards Unit 2 hand in, in April 20% of final grade.
- Formative assessment throughout lessons.
- End of half term written test mirroring exam.

unit so it's important students become confident at the design side of engineering.

Overview of the knowledge and skills covered in this unit:

- Orthographic drawing and section views
- Mechanical components
- Destructive and non destructive testing
- Product analysis
- How engineered products function
- Technical drawings for design skills (Isometric)

How will this be assessed?

- Aiming towards Unit 2 hand in, in April 20% of final grade.
- Formative assessment throughout lessons.
- End of half term written test mirroring exam.

- cheap models
- Applying maths to material wastage sums
- Applying previously taught knowledge to exam style questions

How will this be assessed?

- Aiming towards Unit 2 hand in, in April 20% of final grade.
- Formative assessment throughout lessons.
- End of half term written test mirroring exam.

- Joining methods
- CAD/CAM
- Drawing techniques (isometric and orthographic)

How will this be assessed?

- Exam style questions.
- End of half term test.

- Ohms Law
- Graph reading
- Material wastage

How will this be assessed?

- Exam style questions.
- End of half term test.