The Ellesmere Port C of E College

Part of the Frank Field Education Trust

Year 9 Design & Technology - Product Design & Manufacturing
Learning Programme 5

The LORIC skill focus for his LP is: COMMUNICATION.
The Moral Virtues focus for this LP are: COURAGE and HUMILITY.

Courage - Acting with bravery and overcoming fears.
Humility - Having a modest view of oneself.

What will I be learning about in this Learning Programme?
How designers use a range of design influences and tessellation to create original ideas. The four scales of production and the differences between them. What quality control is and how to apply this when manufacturing with different materials. How to manufacture safely in the workshop.

Where have I seen this learning before?
In Year 7 & 8 design & technology you will have used these tools and equipment to make prototypes from timbers, papers & boards, textiles and polymers. You will have learnt about the sources of different materials and how they are processed.

What could I use it for?
You can use metal, timbers and polymer materials to manufacture products in design & technology over your next 5 years; you will apply your knowledge of metals in the GCSE Design & Technology exam. You can use hand tools to create products in your everyday life.

Literacy:
- Capital letters must be used at the start of sentences and for the first letter of proper nouns
- Full stops must be used at the end of a sentence
- Question marks must be used at the end of a question
- Apostrophes should only be used for possession or omission
- Days of the week and months must be spelled correctly
- Key words must be spelled correctly

In LP5.1, I will know: **11/05/26 - (WK 1)**	**Key Vocabulary**	**Homework**
what is meant by quality assurance and quality control in manufacturing.	Quality	Calculating area and tessellation.
In LP5.2, I will know: **18/05/26 - (WK 2)**	**Key Vocabulary**	**Homework**
how to make and use a jig to manufacture identical products; how to use a range of precise wastage skills to cut and shape my holder.	Template	Scales of production.
LP5 RLW, I will: **01/06/26 - (WK 1)**		
review my learning, recalling and applying key knowledge, and focus on closing any gaps in my knowledge.	Revision	Use revision techniques to prepare for the summative assessment.
In LP5.3, I will know: **08/05/26 - (WK 2)**	**Key Vocabulary**	**Homework**
how to use a range of precise abrading skills to shape my holder, using a file or abrasive paper. Extended Task.	Abrading	Composite materials.
In LP5.4, I will know: **15/06/26 - (WK 1)**	**Key Vocabulary**	**Homework**
my strengths and areas for development from my learning so far by completing a summative assessment; how to finish the edges and surfaces of my mobile phone holder design.	Development	Metal manufacturing processes.
In LP5.5, I will know: **22/06/26 - (WK 2)**	**Key Vocabulary**	**Homework**
how to accurately cut a threaded bar and file the burred edges to make safe.	Thread	Quality Control.
In LP5.6, I will know: **29/06/26 - (WK 1)**	**Key Vocabulary**	**Homework**
how to assemble and finalise the manufacture of my phone holder. Extended Task.	Finalise	Metal stock forms.
In LP5.7, I will know: **06/07/26 - (WK 2)**	**Key Vocabulary**	**Homework**
how to test and evaluate the design and manufacture of my mobile phone holder.	Evaluate	Manufacturing diary.

PAT Task 1

PAT Task 2

Resources to support learning:
The following websites contain extensive revision material and information to increase design & technology subject knowledge:
www.technologystudent.com;
www.mr-dt.com;
www.bbc.co.uk/bitesize.

FFET Award Challenge for this Learning Programme:
Create a mood board to assist with design inspiration. This can be based on nature, geometric forms, architecture or other forms of inspiration.