The Ellesmere Port C of E College

Part of the Frank Field Education Trust

Year 8 Design & Technology - Polymers Desk Tidy Design
Learning Programme 3

The LORIC skill focus for his LP is: RESILIENCE
The Moral Virtues focus for this LP are: RESPECT and JUSTICE

Respect - treat others how you would wish to be treated yourself.
Justice - our College rules are fair and reasonable.

What will I be learning about in this Learning Programme?
The source, categories and types of polymers; the impact of polymers on the environment. The process of thermoforming polymers. Communicating design ideas and applying workshop safety when shaping and forming polymers. How to use a Gantt Chart to plan the stages of manufacture to make a functioning polymer desk tidy.

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

What could I use it for?
You can use polymer materials to manufacture products in design & technology over your next 6 years; you will apply your knowledge of polymers in the GCSE Design & Technology exam. You can use hand tools to create polymer items 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 LP3.1, I will know:	**06/01/25 - (WK 2)**	**Key Vocabulary**	**Homework**
what synthetic polymers are, their source and how they are processed; the environmental and social impact of using polymers to make products.		Polymers	The stages of processing polymers.
In LP3.2, I will know:	**13/01/25 - (WK 1)**	**Key Vocabulary**	**Homework**
the difference between thermoplastic and thermosetting polymers; the different types of polymers, their properties and uses.		Thermoplastics	Interview your desk tidy primary user.
In LP3.3, I will know:	**20/01/25 - (WK 2)**	**Key Vocabulary**	**Homework**
how to explore the desk tidy context using the 5Ws strategy; how to investigate requirements and record the sizes of stationery.		Context	Research polymer products.
In LP3.4, I will know:	**27/01/25 - (WK 1)**	**Key Vocabulary**	**Homework**
how to communicate my desk tidy ideas using 2D & 3D techniques and annotation; how to test my desk tidy idea through precise card modelling. Extended Task.		Annotation	Working safely in the DT workshop.
In LP3.5, I will know:	**03/02/25 - (WK 2)**	**Key Vocabulary**	**Homework**
how to use a Gantt chart and my initiative to plan the manufacturing stages of my desk tidy; which equipment and material I will be using and will have gratitude for the resources that are provided.		Gantt chart	Risk assessment of tools and equipment.
In LP3.6, I will know:	**10/02/25 - (WK 1)**	**Key Vocabulary**	**Homework**
how templates ensure accuracy when marking out the desk tidy; how to use of a file to smooth the edges of my acrylic body.		Template	Calculating area task.
LP3 RLW, I will:	**24/02/25 - (WK 2)**		
review my learning, recalling and applying key knowledge, and focus on closing any gaps in my knowledge.		Revision strategy	Revise for summative assessment.
In LP3.7, I will know:	**03/03/25 - (WK 1)**	**Key Vocabulary**	**Homework**
how to use a coping saw and scroll saw to cut out my acrylic desk tidy head. Extended Task.		Wastage	Wastage manufacturing methods (coping saw and scroll saw)

PRT Task 1

PRT 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:

Interview a primary school pupil to find out their needs and wants for a desk tidy. You can choose how to present your questions and their answers.