



Year 7 Product Design -ART DECO Chocolate Mould

Learning about this topic is important because: <i>This project introduces CAD/CAM along with the iterative design process and basic polymer properties/characteristics. Whilst also developing and refining key design and problem-solving skills (develop, communicate, record and justify design ideas using a range of appropriate techniques).</i>	
This builds on: (Primary school experience of D&T varies greatly) <i>Primary research methods</i> <i>Creative design and problem-solving skills.</i> <i>Skills and experiences within the workshop environment</i>	
This leads to: <i>Learning about how to design for a specific design period or style</i> <i>Understanding how products are commercially manufactured</i>	
We will learn: <i>About the evolution of Art Deco and how it influenced design and architecture</i> <i>To describe how chocolates/bars have been commercially manufactured</i> <i>To explain how your chocolate bar would be commercially manufactured</i> <i>To manufacture a chocolate from the production of a chocolate mould</i>	We will develop/practise skills including: <i>Making successful vacuum forming moulds</i> <i>Produce a dimensioned chocolate mould with shapes and textures that reflect the Art Deco style era</i> <i>Communication skills (visual and verbal)</i> <i>Applying batch production techniques</i> <i>Designing packaging and marketing strategies</i>
Some of the vocabulary that we will use includes: <i>Characterised, geometric patterns, cubism, Streamline, Chic, Vacuum forming, Prototype, draft angle, polystyrene, thermoforming, moulding, batch and mass production. Fairtrade, Ghana</i>	You could learn more about this topic by: Art Deco in 9 Minutes: Why Is It the Most Popular Architectural Style? - YouTube Art Deco https://www.tate.org.uk/art/art-terms/c/cubism https://www.youtube.com/watch?v=IVwtX14tznI – Chocolate bars https://www.fairtrade.org.uk/farmers-and-workers/cocoa/ Design and Technology (D&T) KS3 Vacuum forming BBC Teach - YouTube Rotational Moulding Chocolate Easter Eggs - YouTube Easter Egg
Your teacher will assess your knowledge & understanding throughout the topic by looking at your work, questioning, discussion and giving you feedback in lots of different ways. The key pieces of work in this topic are:	
Assessment Area	Below/Equals/Above
You have understood the principles of Art Deco and how it has influenced design and architecture	B: Display basic evidence of Art Deco through limited use of resources E: Can present information relating to Art Deco style with designs relating to the basic principles of the design era A: Has presented design work that is reflective of the Art Deco style with the learner being able to discuss good and bad points connecting to Art Deco
Describe how chocolate bars have been commercially manufactured.	B: Can explain how chocolates are made commercially with some errors E: Can explain how a chocolate bar is manufactured linking to scales of production A: Can explain how a chocolate bar is manufactured linking to scales of production, materials, costing, fairtrade and reflection upon packaging
To manufacture a chocolate bar from the production of a chocolate mould	B: Produce a simple chocolate with no deco related pattern E: Produced a chocolate with one deco related pattern A: Produced a chocolate with two or more deco related patterns



Year 7 Product Design – Alessi Phone Holder



West Kirby
Grammar School

Learning about this topic is important because:

- *This project introduces CAD/CAM along with the iterative design process and basic polymer properties/characteristics. Whilst also developing and refining key design and problem-solving skills (develop, communicate, record and justify design ideas using a range of appropriate techniques).*
- *Students to gain a holistic understanding of the design and technology process, from concept to creation. It combines hands-on skills, problem-solving, creativity, and an appreciation for design.*

This builds on: *(Primary school experience of D&T varies greatly)*

- *Research skills, Creative design and problem-solving skills, Model making skills.*
- *This project takes the foundational concepts and skills learned during KS2 and applies them to a more advanced and specialised context. It enables students to build upon the fundamentals of design and technology while introducing them to more complex and detailed design and manufacturing processes.*

This leads to:

- *Basic CAD/CAM and polymer forming skills.*

We will learn:

This project offers a holistic learning experience, combining design principles, technical skills, safety awareness, creativity, and problem-solving:

- *To describe the sources of polymers.*
- *To describe thermoplastic polymers and their applications.*
- *To describe thermosetting polymers and their applications.*
- *To explain the advantages of CAD.*
- *To produce a simple 2D CAD drawing.*

We will develop/practise skills including:

- *Shaping polymer products using a strip heater.*
- *Produce a dimensioned 2D CAD drawing.*
- *ICT skills*
- *Design skills*
- *Communication skills (visual and verbal)*
- *Thinking skills*
- *Creative problem solving skills*

Some of the vocabulary that we will use includes:

- *Zoomorphic*
- *Anthropomorphism*
- *Alessi*
- *Iterative Design*
- *ACCESS FM*
- *CAD/CAM*
- *Laser Cutter*

You could learn more about this topic by:

[Introduction to CAD - Computer Aided Design - YouTube](#)
[2D Design - Basic tutorial - YouTube](#)
[4.2d Plastics | Design Technology \(ruthtrumpold.id.au\)](#)
[2D Design Video Tutorial 1: The Basics - YouTube](#)
[Make 4 Different Styles Of Mobile Phone Stand Using Cardboard – How to Make Mobile Phone Stands - YouTube](#)
[Laser cutting - BBC Teach](#)
[Line bending - BBC Teach](#)
[How does laser cutting work - Basics explained - YouTube](#)
[sketchup tablet stand - YouTube](#)



Your teacher will assess your knowledge & understanding throughout the topic by looking at your work, questioning, discussion and giving you feedback in lots of different ways. The key pieces of work in this topic are:

- *Students will be assessed on- research, design, making and evaluative skills. Theory knowledge will also be assessed by an end of unit test.*