

Year 9 SoW: Iterative Design Process



PROJECT OVERVIEW

Pupils will have the opportunity to consolidate and extend metalworking. They will explore the iterative design process pewter casting small pieces of jewellery.

FINAL PRODUCT

A unique high quality piece of pewter cast jewellery using the iterative design process.

ASSESSMENT

- Making
- Design Criteria
- Evaluation

HOMEWORK

- W1. Existing products
- W2. Consumer feedback (iterative design)
- W3. Metal theory
- W4. Investigate alternative tools
- W5. Consumer testing

LITERACY:

Reading for information

Key words/technical terms– pewter casting, iterative, lathe, constru-

NUMERACY:

Scale, contouring, lines of symmetry, measuring, temperature

DIRT / FEEDBACK

- Respond to practical feedback
- Engage with iterative design process
- Likes or dislikes about a piece of work
- Correct spellings
- Grammatical errors
- Respond to comments
- Set targets for improvement in the given focus area
- Compare your work with that of another pupil
- Emoticon your work
- RAG learning objectives
- Record focus area grade on Progress sheets

SMSC & BRITISH VALUES

Safety, sustainability , 6R's, industrial practice

PAC VALUES

Pride in your work
Respect for others
Work ethic

WIDER READING OR RESOURCES

Doddle
Instructables
Metalworking techniques recourse bank
Enamelling extension task
2d design extension task

PLC: EVALUATION (Personal Learning Checklist)

1	What is a wood lathe?
	What are the safety rules for using a wood lathe?
	What products are wood lathes used to make?
2	Do you know what a Design Criteria is?
	What should be included in a Design Criteria?
	What is the purpose of a Design Criteria?
3	What are the safety rules for the brazing hearth?
	How do you use the polishing machine safely?
	How do you use the polishing machine Skilfully?
4	What is an evaluation?
	Have you identified how to improve your product?
	What are your personal targets?

WK	CONTENT	OBJECTIVE
1	Demonstrate the use of the wood lathe. Emphasis on Health and Safety procedures	To gain appreciation of basic wood turning techniques and how they may be applied
2	Quality assure joints and assemble box	To explore construction and assembly techniques .
	Write a Design Criteria for the pewter cast jewellery	To have a clear understanding of the purpose of a Design Criteria and how to write one
3	Model jewellery ideas in foam using the iterative design process	To develop modelling skills and confidence in the use of the iterative design process
4	Demonstrate the pewter casting process with emphasis on the safe use of the brazing hearth	To secure an understanding of the pewter casting process, develop metalworking skills and use knowledge to develop design ideas iteratively
5	Cut off the sprue and recycle File, polish and attach findings	To extend and consolidate metalworking skills
6	Evaluate the product	To be able evaluate the product against the Design Criteria