

# Year 7 SoW: Materials



## PROJECT OVERVIEW

Pupils will have the opportunity to gain practical and theoretical knowledge of wood, metal and plastics Pupils should develop skills with arrange of relevant hand tools and be able to work safely in the workshop. Pupils will know how materials can be classified through research/investigation.

WK	CONTENT	OBJECTIVE
1	Demonstrate use of marking out techniques, hack saw, vice, centre punch, pillar drill etc. Drill and shape metal.	To gain practical skills and working knowledge of metals including the use of scribes and templates.
2	Board works presentation on metals. Pupils to investigate metals using a variety of sources then produce a fact sheet. Metal quiz. Finalise metal emoji design.	To understand how metals are classified (ferrous vs. non-ferrous). To research using a range of
3	Demonstrate use of files, emery cloth and polishing machine etc. Shape, smooth, stamp and polish emoji.	To develop practical metal-working skill.

## FINAL PRODUCTS

Aluminium emoji (sawn, filed, polished and stamped)

## ASSESSMENT

- Making
- Investigation
- Planning

## HOMEWORK

See Homework Sheet

## LITERACY:

reading for information

Key words/technical terms— ferrous, machine, emery, hack saw, vice

## NUMERACY:

Scale, contouring, lines of symmetry, measuring,

## 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

Doodle  
Instructables  
Technologystudent.com  
www.aluminum.org  
Extension worksheets

## PLC: EVALUATION (Personal Learning Checklist)

1	Why do we classify materials?
	What are the two main groups of metals?
	How are these groups different
2	Can you name at least 5 tools using the correct technical terms?
	Which metal are we using and why?
	How do you hold a hacksaw?
3	Which three factors do you consider when choosing a file?
	Can you name the different materials used to smooth the edges of wood, metal and plastic?
	Can you explain how to use the polishing machine