

Name Group..... Target
level.....

Teacher Room..... WAG.....
CFL.....

Year 7 Design and Technology

Metal Work and Etching

Design Brief

Produce a project using a range of research and drawing techniques. The theme of the project is Aboriginal patterns. Produce an outcome of a metal



DESIGN VOCABULARY	DESCRIPTION
PATTERN	
MARK MAKING	
ANALYSIS	
CONTRIBUTOR/STAKEH OLDER	
SPECIFICATION	
ETCHING	
ASSESSMENT	
EVALUATION	

HEALTH & SAFETY- A very important area which students must understand is how to work safely in the workshop. You must always be organised in your work shape. To show you some of the dangers we have deliberately set up an unsafe working space to identify potential hazards you could face.



Can you spot ALL the hazards??

Circle the hazards in the photographs- clearly.

Describe what you think is wrong....	Why might this be dangerous?

ABORIGINAL RESEARCH

Home learning is an important part of building knowledge and understanding of your theme. You will create a mini project about Aboriginal history and artwork and create your own pieces across the rotation.

Use the QR codes below to get you started with your research for the written work.

Use the internet to find clear examples of Aboriginal artwork.

You can use ICT to write research but please print out your work before handing in on the deadline set.



Create a booklet/flyer/poster that must include the following information....

- A brief history about Aboriginal artwork
- Describe what ‘dreamtime painting’ is
- Show examples of Aboriginal patterns and artworks
- Create your own Aboriginal style drawing/s.

TEACHER FEEDBACK	
LEVEL 1	Basic written information on the history. Simple marks used in your own drawing showing some pattern similar to Aboriginal style.
LEVEL 2	Good written research with some detail. Well drawn work in the style of Aboriginal work using similar patterns and colours well.
LEVEL 3	Thorough written research on the history and dreamtime work. Great drawing work using materials in varied way to create effective patterning and your use of colour match the Aboriginal style.

MARK MAKING TECHNIQUES- Using the boxes make a series of marks to describe textures, use the resource sheet for ideas.

Bronze: Make a range of simple marks using pen/pencil showing some tone. [L1]

Silver: Make a range of marks that are controlled and build up tone. [L2]

Gold: Create accurate and well observed marks that are inventive and original, showing control over the materials creating a high quality outcomes. [L3]

Create marks using different techniques in the boxes below...





Practice shading lightly and dark to create different tones with a pencil.
Control the pressure you use to get even tones.

LIGHT	
DARK	

Try and show what a coarse abrasive paper and a finer one might look like in marking making techniques	
COARSE	
FINE	

TEACHER FEEDBACK	Complete the work.	Make sure your work is neat and accurate.	Give some peer feedback to another student.	Good use of techniques.	Great progress made.	Show more difference between textures/line weight.
-------------------------	--------------------	---	---	-------------------------	----------------------	--

PRODUCT ANALYSIS- Analysing products help you understand different needs for different types of designs. Answer in as much detail as possible, using full sentences.

<p>KEYRING TYPE</p>				
<p>INTENDED USER Who is the keyring aimed at? Explain your reason why.</p>				
<p>USER NEEDS All of these products have the same basic function, but what else does the intended user need /wants from it?</p>				

IDENTIFYING YOUR USER-

After your product analysis and building understanding about users and needs for different products you need to identify the user of the keyring you will design.

Who is your user, who are you designing for?

What does this user need from the design of your keyring (patterns on the surface)?

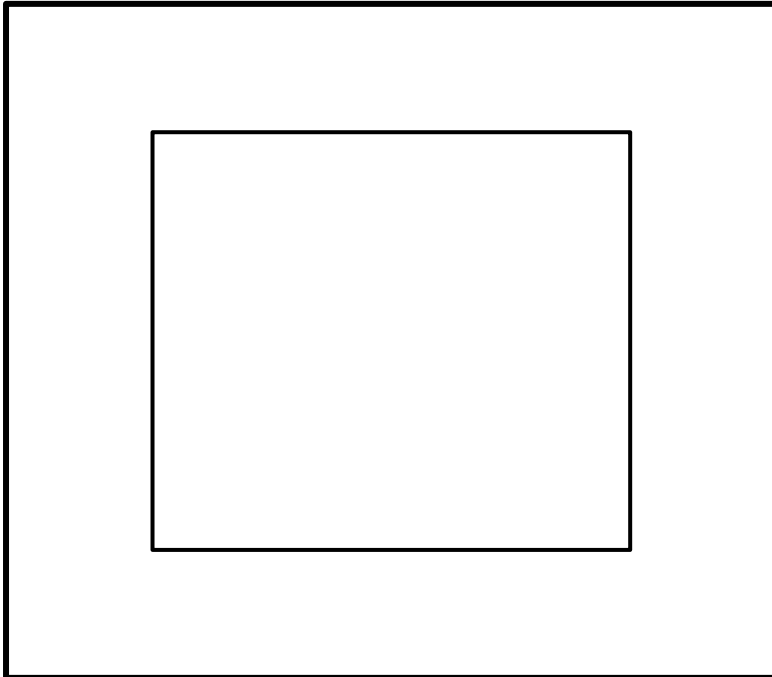
Level Descriptors	
Bronze	Describe who the user will be basically [L1]
Silver	Explain the needs of that user and how this will inform the design [L2]
Gold	Describe how your design will meet the needs of the user and be inspired by Aboriginal pattern [L3]

DESIGNING- Use the square base shape to add your Aboriginal inspired shapes to create your keyring design. Mark out where the hole will be drilled for the ring fastening.

Bronze: Draw 2 simple designs using Aboriginal style patterns and basically complete the WWW & EBI [L1]

Silver: Use a range of mark making techniques to fill the whole design box for each, linking to Aboriginal patterns, complete the WWW & EBI's [L2]

Gold: Create 2 designs that link clearly to Aboriginal pattern and use a range of mark making styles. Complete the WWW and EBI in detail and use them to inform the next design [L3].



DESIGN ONE

WWW.....

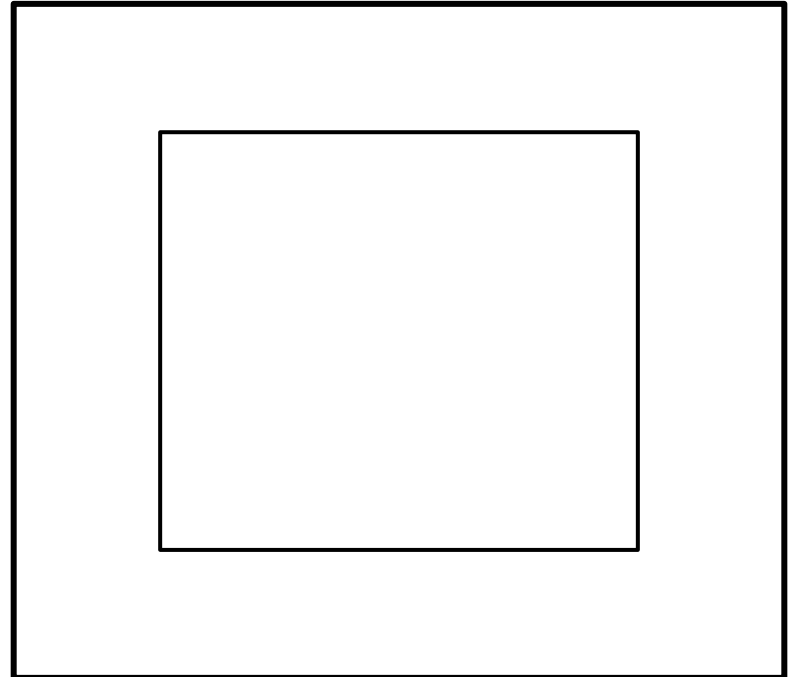
.....
.....

EBI.....

.....
.....

.....

Take the WWW and EBI From design ONE and use them to make improve a SECOND design. Take the WWW and EBI From design TWO and use them to make improve a THIRD design.



DESIGN TWO

WWW.....

.....
.....

EBI.....

.....
.....

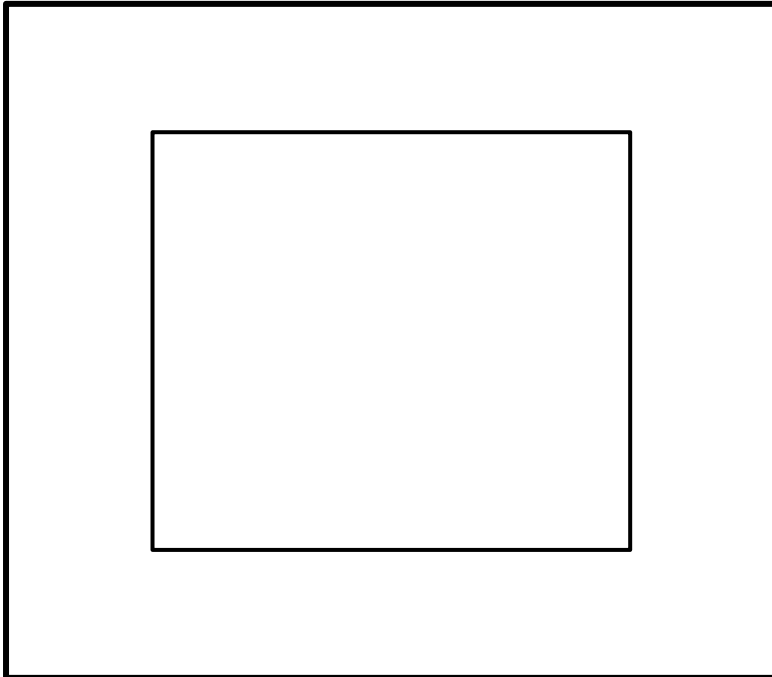
.....

DESIGNING- Use the square base shape to add your Aboriginal inspired shapes to create your keyring design. Mark out where the hole will be drilled for the ring fastening.

Bronze: Draw 2 simple designs using Aboriginal style patterns and basically complete the WWW & EBI [L1]

Silver: Use a range of mark making techniques to fill the whole design box for each, linking to Aboriginal patterns, complete the WWW & EBI's [L2]

Gold: Create 2 designs that link clearly to Aboriginal pattern and use a range of mark making styles. Complete the WWW and EBI in detail and use them to inform the next design [L3].



DESIGN THREE

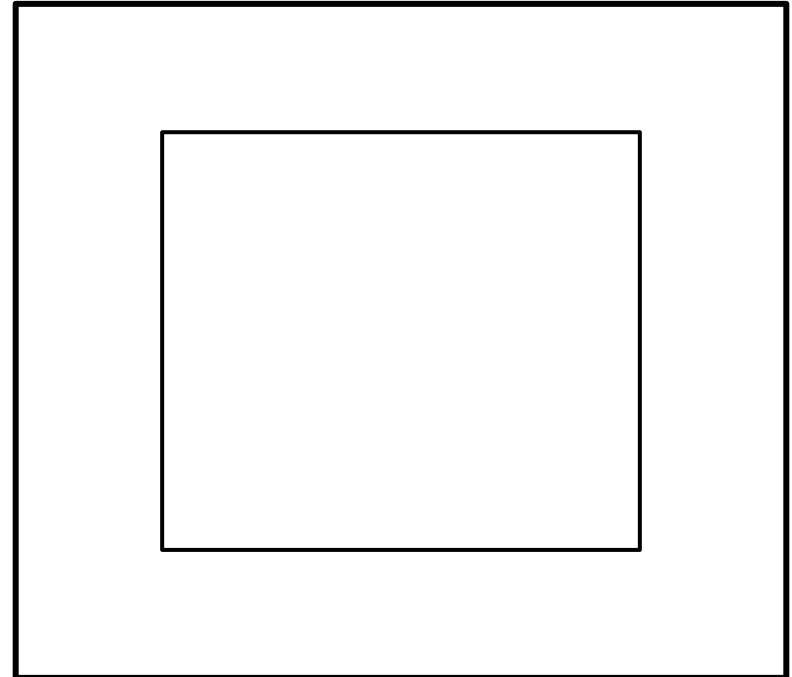
WWW.....

.....
.....
.....

EBI.....

.....
.....
.....

Take the WWW and EBI From design TWO and use them to make improve a THIRD design.



FINAL DESIGN

My final design meets the user needs and wants because

.....
.....
.....
.....
.....
.....
.....
.....

MATERIAL SPECIFICATION-

You are going to have the choice of two different materials to create your keyring from, copper and brass. Find out the information about each of the materials before making your final selection.

Use this QR code and the internet to find out information about each materials, advantages and disadvantages of using each.

Make a final selection after you have finished your research and say why you have chosen it.



My choice of material is...

Because...

Material Name:

Properties:

Advantages:

Disadvantages:

Material Name:

Properties:

Advantages:

Disadvantages:

RISK ASSESSMENT

Complete the table below with CLEAR writing. This is an important document as part of the health and safety of working in the workshop.

HAZARD	POSSIBLE OUTCOME	PERSON AT RISK	RISK LEVEL	CONTROL MEASURES	WHO IS RESPONSIBLE?

This table must be complete and clear with as much detail as possible. No making can take place until this work is complete and signed by a teacher.

STAFF SIGNATURE..... DATE.....

Key
High, likely to happen
Medium, might happen
Low, could happen

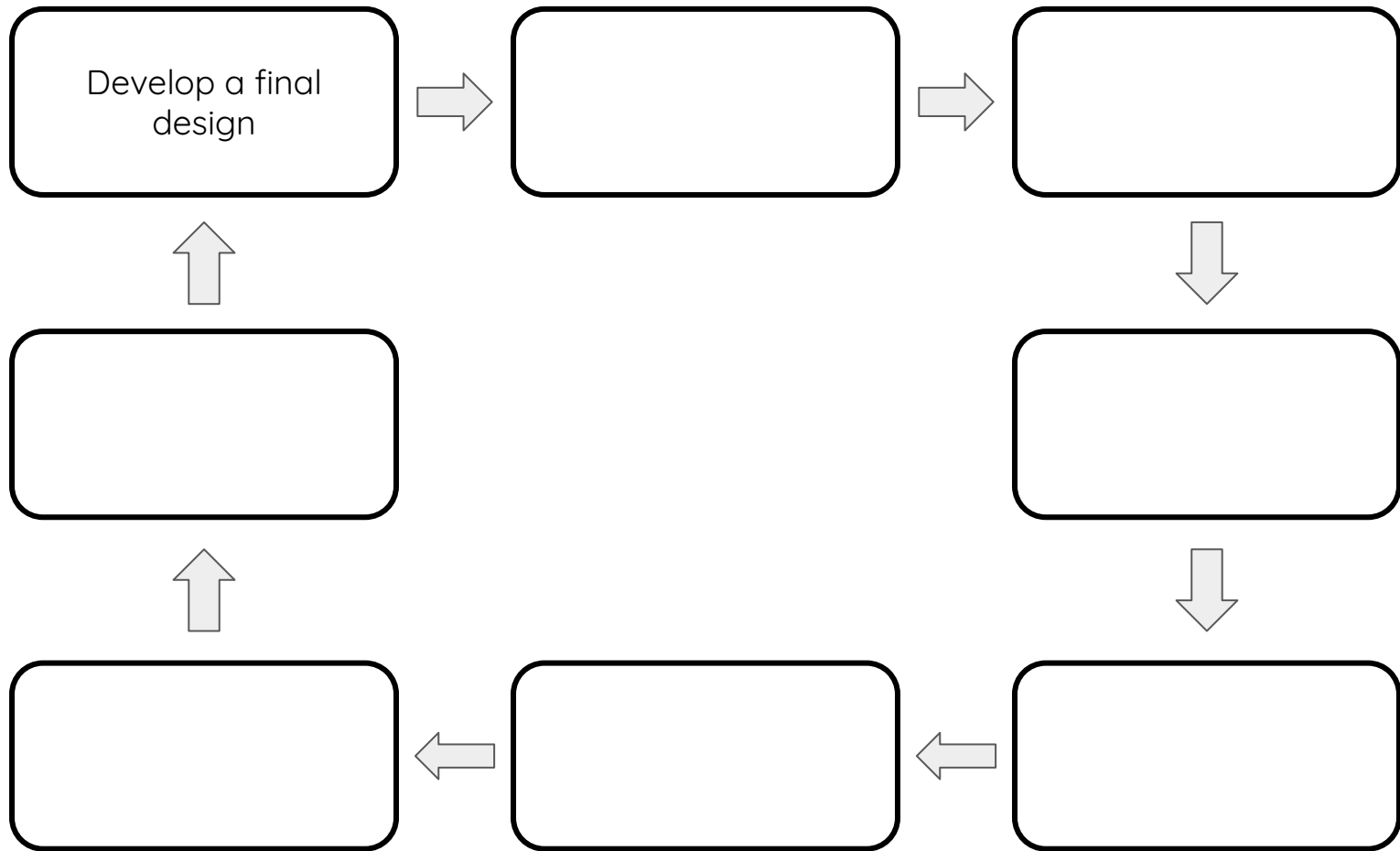
DESCRIBE THE PROCESS OF ETCHING-

Write about the process used to fix your pattern onto the metal keyring. You can hand write this or use iPads/ICT and print and stick in the information. Feel free to add images drawn or photographic (these could be taken of equipment in the workshop) to illustrate the process.

You **MUST** include the words **FERRIC CHLORIDE, MASKING and HAZARDS.**

TEACHER FEEDBACK	Complete the work.	Use full sentences, checking spelling and grammar	Include the keywords	Add images to develop work further	Good use of subject specific language	Very thorough and detailed writing	Clear and effective presentation
-------------------------	--------------------	---	----------------------	------------------------------------	---------------------------------------	------------------------------------	----------------------------------

FLOWCHART- A flowchart shows the order of things. Below is a blank chart that will show the making process from designing to completing your outcome. Use teacher demonstrations and knowledge to use as a reminder of the next steps.



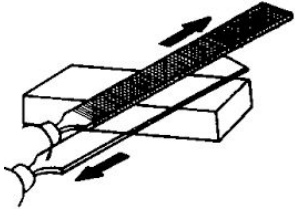
TOOLS IN THE WORKSHOP- HEALTH AND SAFETY

Bronze: Name all the equipment after watching the demonstration/introduction.

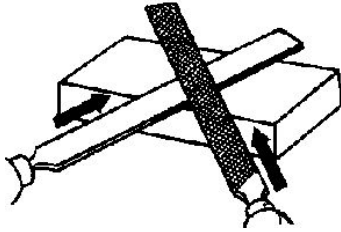
Silver: Label the items correctly on the right parts of the machinery/techniques for the tools.

Gold: In addition to the above describe how to use it safely.

Technique 1



Technique 2



Correctly name the two filing techniques shown

Technique 1

Technique 2

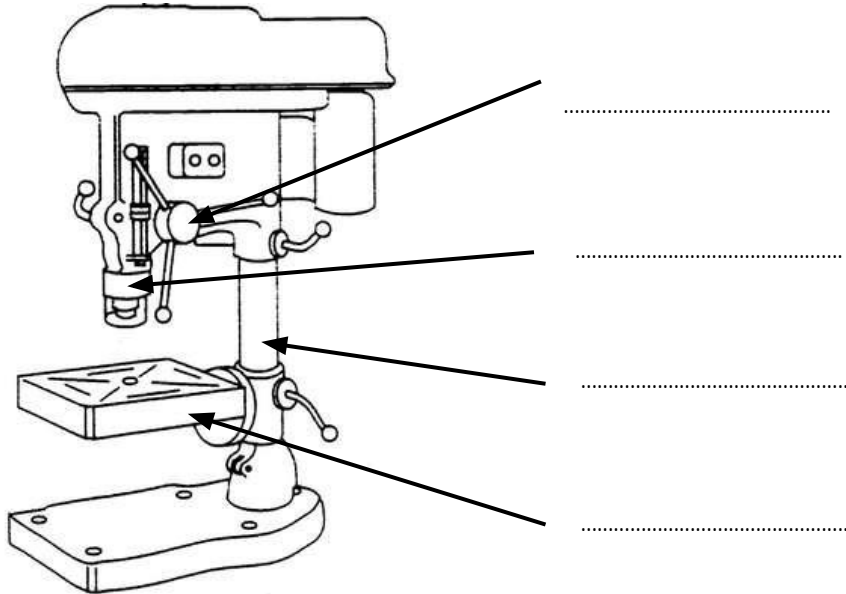
Describe the advantage of using the second technique

Name each of the following metal files from the diagram of their end profiles



Name the two different types of abrasive paper you will use when edge finishing.

..... and



DESCRIBE THE SAFE USE OF THIS MACHINE

PRACTICAL ASSESSMENT AND EVALUATION

CRITERIA	SELF EVALUATION	PEER ASSESSMENT	TEACHER ASSESSMENT
I worked safely			
The edges of the materials are smooth and well finished			
The outcome is presented well and looks good			
I completed my risk assessment clearly and in detail			
Reflect on the whole rotation from start to finish, use the WWW EBI structure			
Level Achieved- For Teacher assessment	[1- Bronze] I made my outcome following the process and worked safely.	[2- Silver] I made my outcome that matched the design accurately, it has smooth edges and I worked safely.	[3- Gold] I completed my outcome to a high standard, which matched my design accurately. I worked safely and considered the safety of others around me.