Copper Etching Keychains

with Miss Ani and Miss Jordyn

Sharpie Resist Etching

The process of etching can be done many different ways. For this project we will be using sharpies as a resist.

Sharpies are alcohol based which allows them to resist the acid. We will be using **Ferric Chloride**.

Use of Ferric Chloride requires a few safety precautions.

- Make sure bag is sealed with paper plate underneath.
 If bag starts leaking let me know **immediately** and we will double bag it
- 2. Baking soda will neutralize the acid.
- 3. Never throw away a bag with ferric chloride in it.













A Brief History of Copper Etching

- Etchings were first produced around 1500 in Southern Germany
 - \circ they used iron plates
- German artists in the Danube school (painters-turned-printmakers) mainly made landscapes
- Early etching was also explored in Italy and France.
- Prints from the Danube school were often scenes of nature, rugged land, or human events happening in nature



Albrecht Altdorfer, 1520

Process

- If you want thin lines, use a ultra fine sharpie.
- For thicker lines, use a regular sharpie.
- Black sharpie is the best choice because it doesn't wear off as fast.

Whatever copper is NOT covered in sharpie will be etched away. The sharpie design will be raised up on your final piece.







Day 1

- Sketch out TWO different designs in your sketchbook.
 - No words, must be interestingly designed with <u>clean lines</u> and sketch them out.
 - b. Details are important!
 - c. Plan for where the hole will be for the keychain with a sharpie dot.
 - d. MINIMUM of 60% of your copper piece needs to be covered/designed with sharpie.





Day 2

- Choose which design is your favorite and check with your teacher- they will provide you with your metal piece.
- Draw the chosen design on your piece of metal with a sharpie. Take your time, if the drawing is messy- your etching will be messy and you will be disappointed in your grade.
 - a. If you mess up you can use hand sanitizer/rubbing alcohol and a q-tip to remove your mistake.
- 3. Cover the back of your piece of metal with tape and write your name in sharpie on top of the tape and put it on my desk.



SHARPIE IS KEY!

Day 2 cont...

- Once your design is finished and you have taped the back and written your name on top of the tape you can give your metal piece to your teacher.
- 2. They will then place it in ferric chloride for 45-60 minutes to etch.
- The ferric chloride will then be neutralized by baking soda & safe to touch.





Day 3:

- 1. You will clean off your piece in the sink and remove the tape & sharpie. Sharpie can be removed with <u>hand sanitizer</u>.
- 2. Next step is to buff the front and back of the copper with steel wool. Remember your copper is thin so don't go too crazy!
- 3. Once you are finished you will punch a hole for the keychain.
- 4. You need a jump ring to go through the hole- this will take pliers to do.

Optional

-Add a key chain charm

-Add backing to make it stronger.





Opening Jump Rings

to Open & Close a Jump Ring