
Digital Notebook

3D Cardboard VAC

Alex Fortune - BA Education & Illustration
Student no. 20345036



Aim:

To **reconstruct** a **3D model** of our **source object** (old shoe) using **cardboard**, supplemented by research & investigative drawing, exploring 3D form, scale, proportion, surface texture, movement (where relevant) and stability.

Theme: “Card Cobbler”



Source Object:

Learning Outcomes:

- Use **drawing** to **analyse, investigate, plan** and **record** visual information from primary sources.
 - Identify **relevant and appropriate artists work** to support research, design and construction stages as part of the art-making process.
 - **Deconstruct, simplify and render structure** as a set of geometric shapes and forms.
 - **Experiment** with a **variety of cardboard** material to make three-dimensional forms based on a design plan.
-
- Be aware of **health and safety** issues with regard to the use of media, tools and adhesives in a classroom context.
 - Explore **surface quality and texture** through the manipulation of card and other material.
 - Employ a variety of **joining and assemblage techniques** to combine forms.
 - **Construct** a **scaled replica** of source object using cardboard.
 - Propose an **outline for a related UoL appropriate** to the classroom.
 - **Record** the **research, design and construction process** in a digital notebook.
 - Develop an **awareness of cardboard** in the context of the **environment, recycling, reusability and potential** as an art-making medium.

Theme: “Card Cobbler”

What is a Cobbler?

Cobbler, often used interchangeably with the term ‘shoemaker’, is the profession of **mending and making footwear**



Shoemakers are skilled artisans who make shoes by hand often out of brand new leather. Cobblers, on the other hand, **repaired shoes**. In fact, cobblers were often **forbidden from working with new leather**. Instead, they had to use **old leather** to make their repairs.

The use of the term ‘cobbler’ within the theme for this VAC intertwines well with the main material - **cardboard**, as cobblers would often use **offcuts or pieces that would otherwise be binned** to fix their shoes, just like we are using **old cardboard boxes** to replicate our shoes

Theme: “Card Cobbler”

What is a Cobbler?

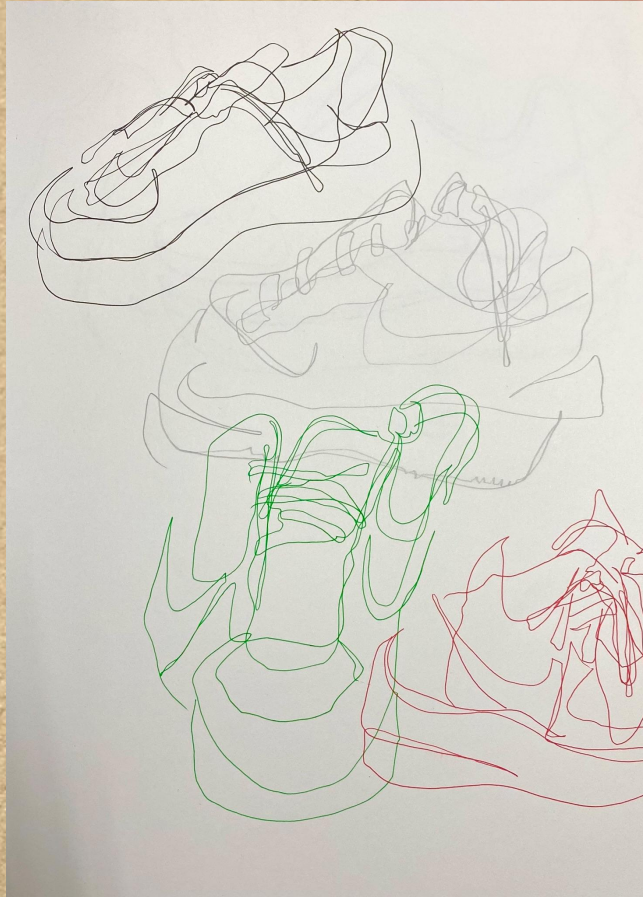
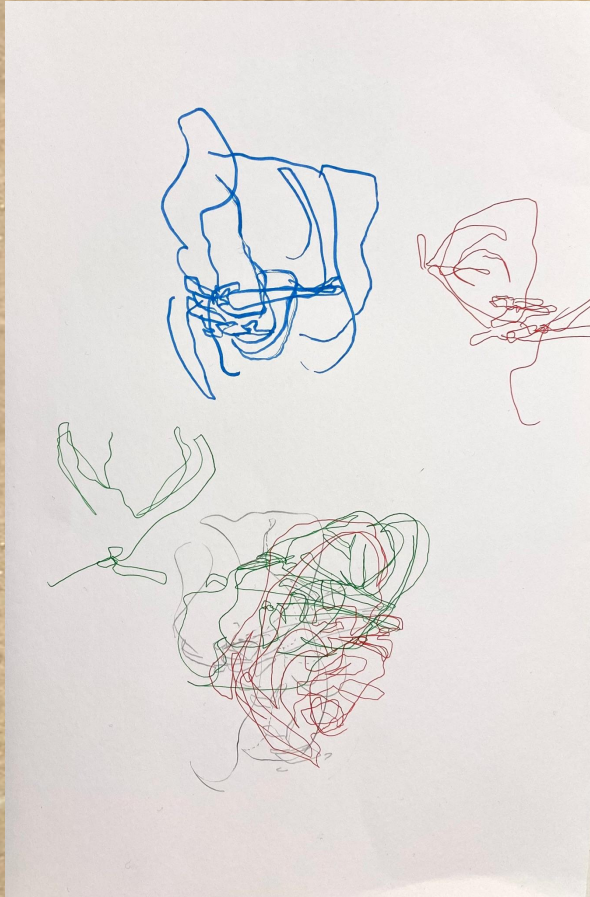
Cobblers are talented professionals. They can fix shoe problems like: broken heels, worn out soles, ugly wrinkles, crooked seams, unsightly holes, damaged waterproofing, faded colors, or burst eyelets.

Every shoe is a puzzle that must be solved and the cobbler must be able to do it even if it's a challenge

When we are creating our shoes, we may not be dealing with broken soles & problems with existing shoes, but through measuring, cutting and gluing, we will be creating our own puzzle to be solved when putting all the pieces of the shoe together



Investigative Drawings:



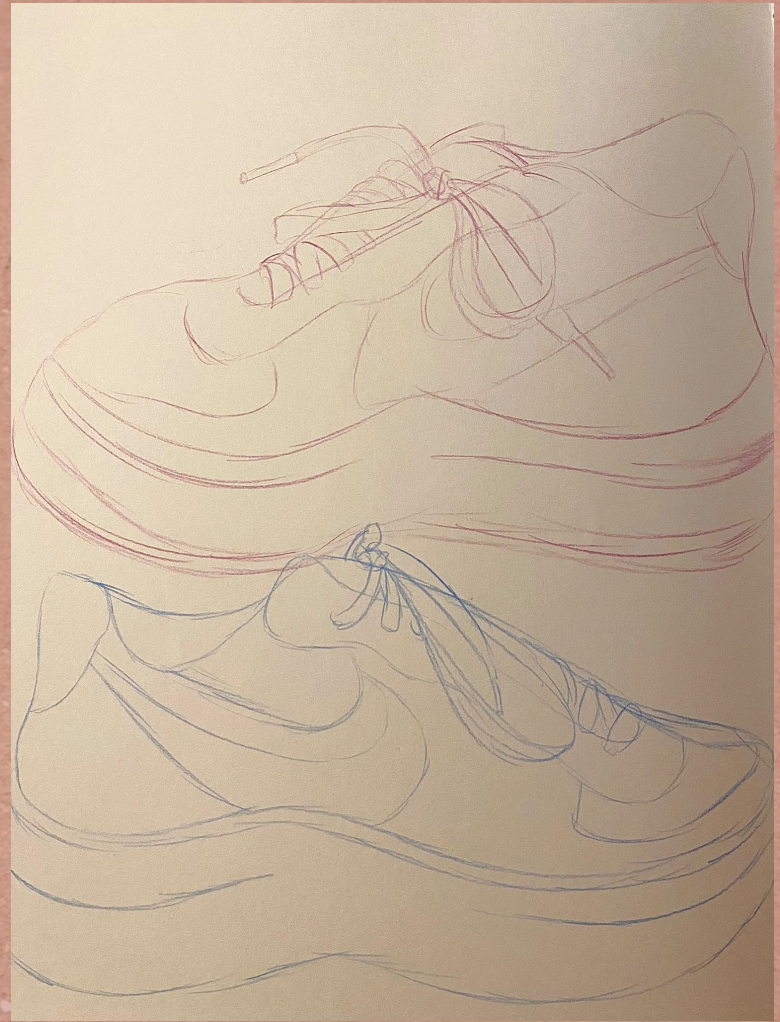
Source Object

Initial quick blind drawings
pictured on the left -
capturing form & shape

Further continuous blind
drawings on the right - forms
become clearer as my hand
got used to drawing without
looking - continuous line
allows for a more flowing line

Investigative Drawings:

Gesture drawings of my source object - build upon these with heavier lines after capturing initial form



Investigative Drawings:

Building up
Tone &
texture

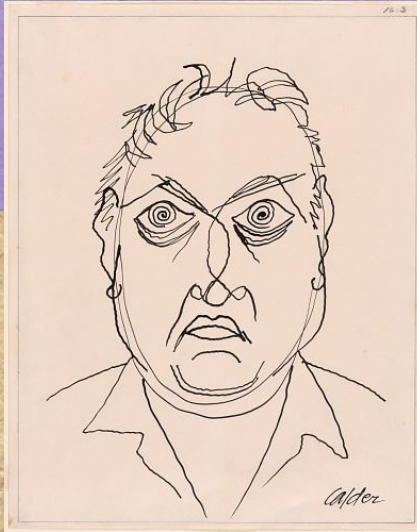


Artist Research:

Alexander Calder

- American Sculptor & Painter
- Works mostly in wire sculpture, creating mobile public structures
- Inventor of the Mobile

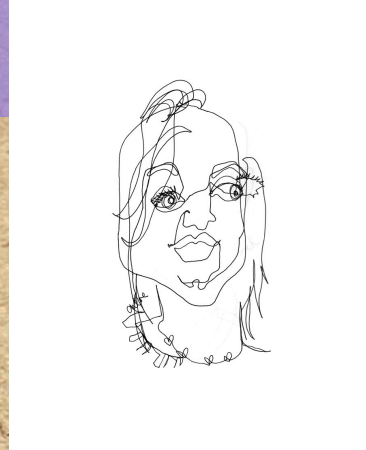
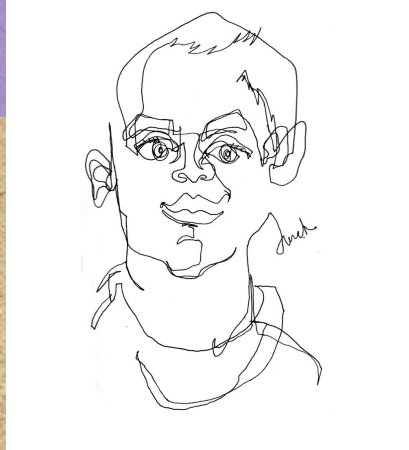
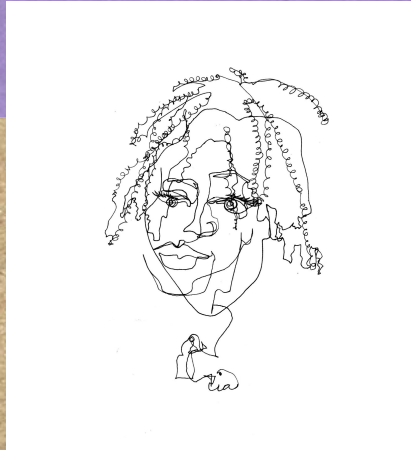
Use of
continuous &
contour line to
create
interesting line
drawing using
both pen and
wire



Artist Research:

Allison Kunath

- Fine artist, designer & Muralist
- Based in California
- Mainly works in watercolour & Acrylic, uses Latex to create outdoor murals

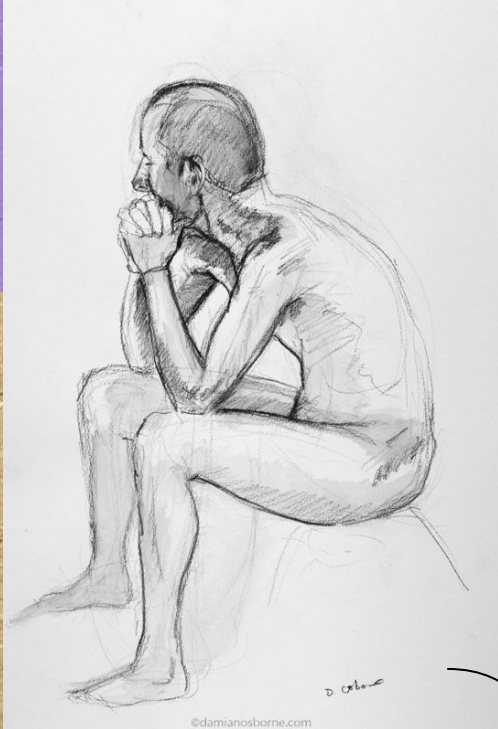


- **Blind drawings** - great looseness, ability to quickly capture shape and form, each portrait is individual so you can tell she was really looking at each person as she drew

Artist Research:

Damian Osborne

- South African Artist
- Contemporary Realism Painter



- Gestural Drawing - quick & loose, capturing form in long sweeping strokes
- Sensitivity to movement

- Example of building up on top of a gesture drawing

Artist Research:

Albrecht Durer

- German Painter & Printmaker - Theorist of German Renaissance
- Worked in engravings & tempura paint



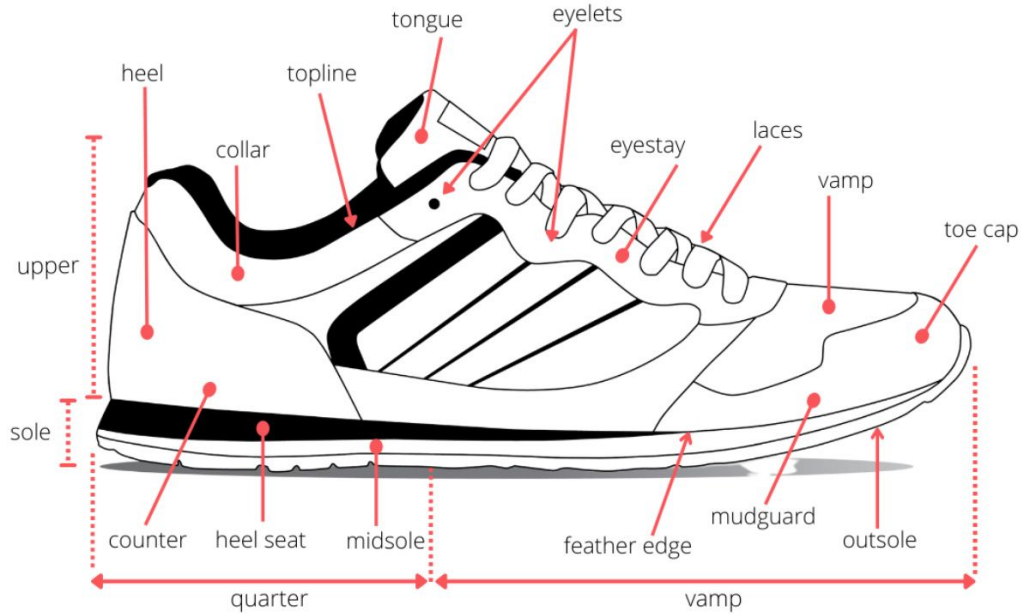
Self Portrait

- Use of light and shadow to create the illusion of texture & form

Footwear Anatomy:

Shoe Anatomy - Side View

www.shoe-lease.com



- Main Structure:

Heel
Toe Cap
Insole
Outsole

- Additional Parts

Upper
Eyelets
Quarter
Vamp
Lining
Tongue
topline
top edge

Anatomy of my Source Object:



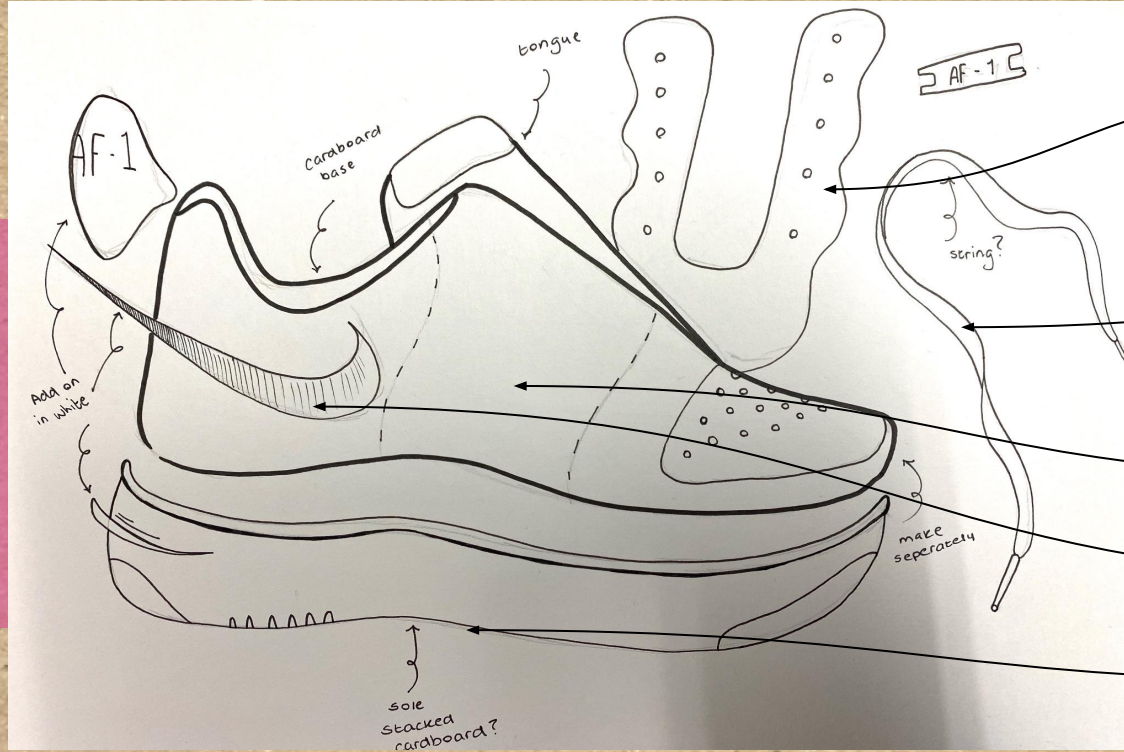
- Main Structure:

Heel
Toe Cap
Insole
Outsole

- Additional Parts

Upper
Eyelets
Quarter
Vamp
Lining
Tongue
topline
top edge

Design Drawing:



Eyestay - to be constructed separately and glued on

Laces - considering both paper & string as a possible material

Main body

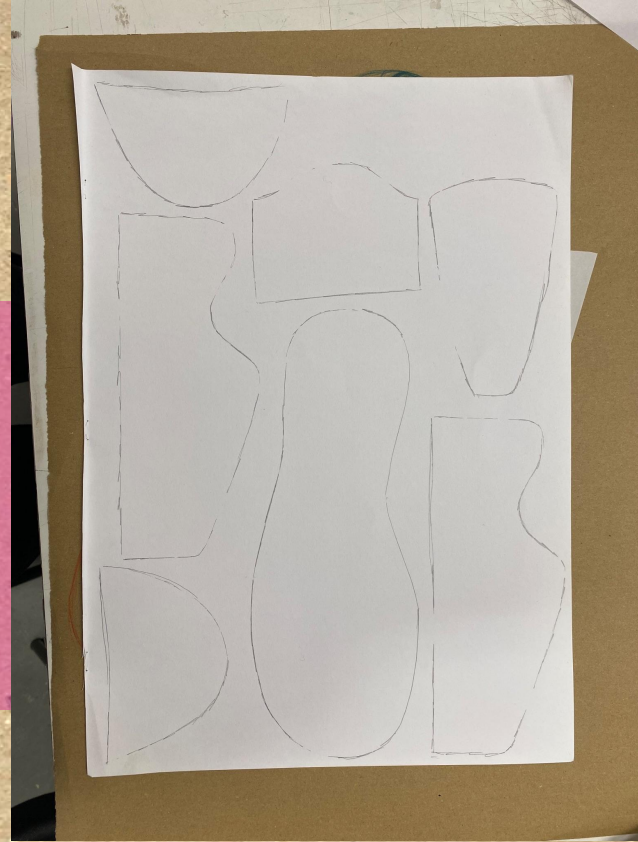
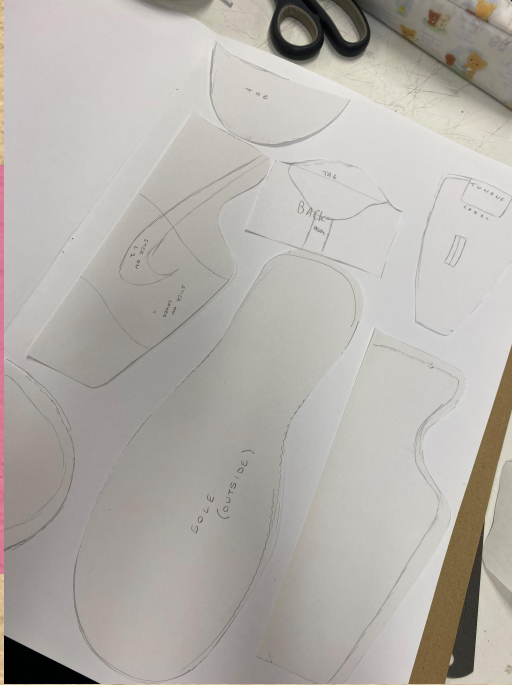
Details - made in lighter gsm white card

Platform & sole - constructed to add height to the shoe

Deconstructed sketch of source object

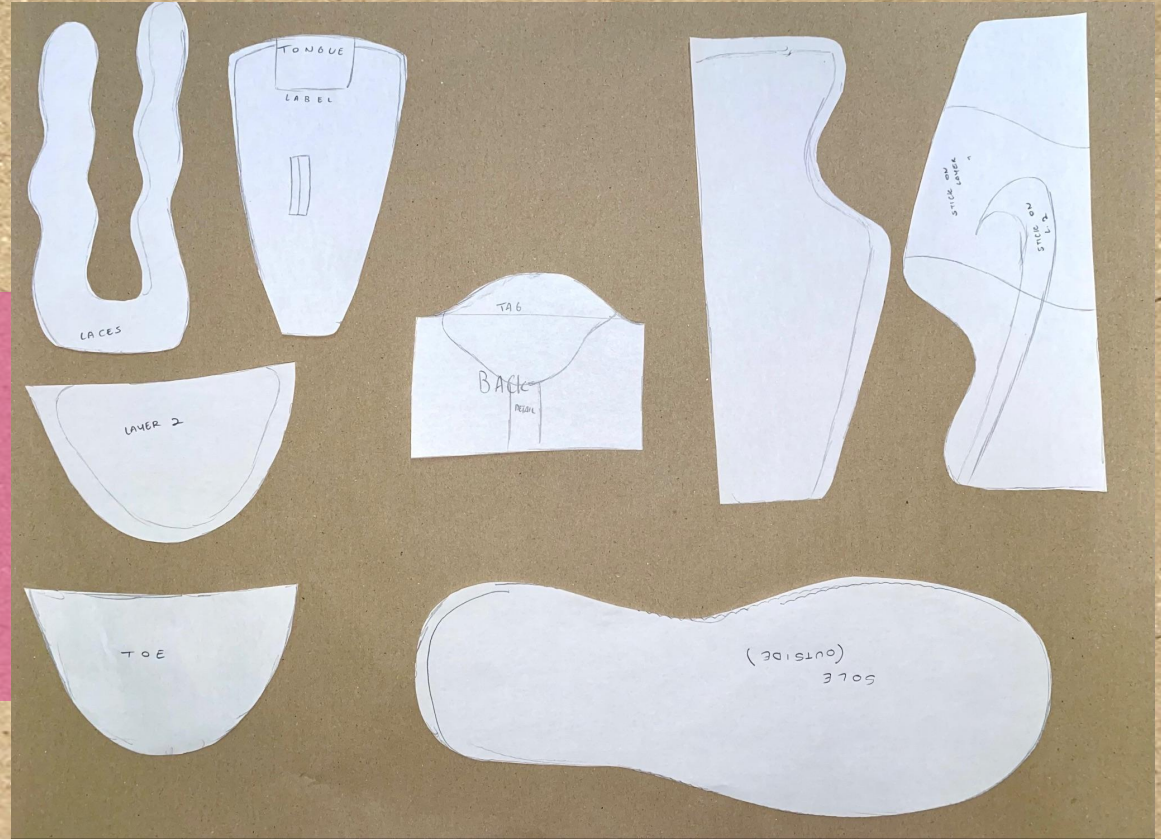
Design Plan:

Initially, to create the design plan I used Tracing paper, laid it down & sketched The main shapes of the shoe to get an Estimation of what it's components Would look like



Design Plan:

I then took these tracing paper sketches & traced around them onto a thicker Paper to create a design plan/pattern

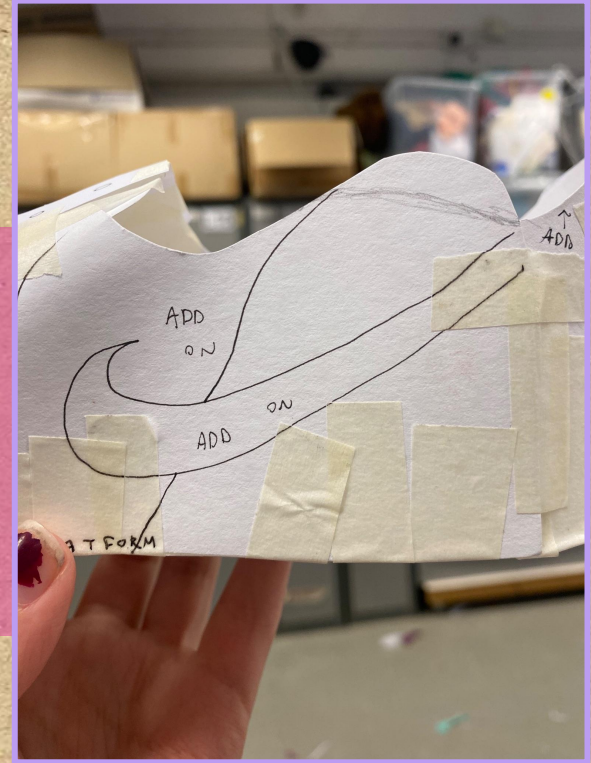
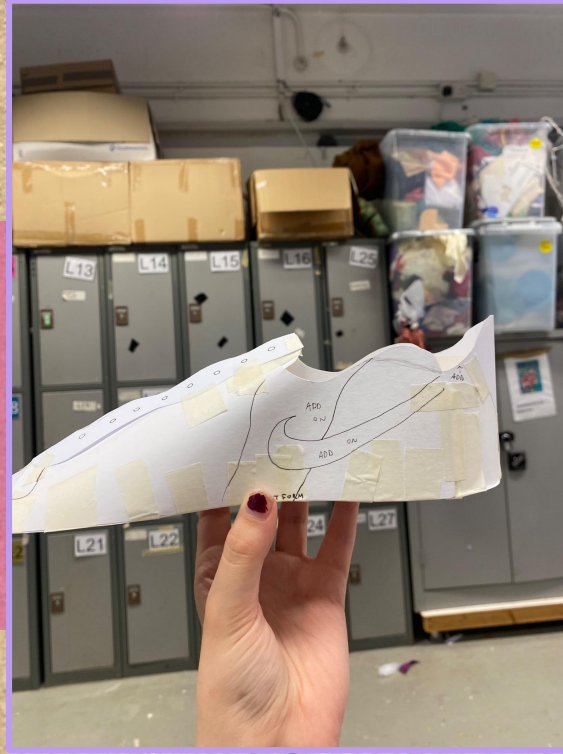


Paper Maquette: Initial construction using my pattern



Using masking tape to join pieces - on both inside & outside of maquette to improve structure

Paper Maquette: Initial construction using my pattern



Marking in areas to add on in the final product with white card to create a different texture

Where does cardboard come from?

Exploring our material



Chemist Carl. F. Dahl developed the process of **pulping wood**, which was later to be used in the paper making process. He named the development the “Kraft process”



Then to create the paper a long process is involved to ensure the wood chips that are pulped are clean and suitable for purpose.

1. the trees are cut and lumbered to create tonnes of logs which go through a machine to be debarked and chipped.
2. These chips are then put through one of two processes – mechanical pulping or chemical pulping.

The pulp is given a final washing to eliminate any contaminants before they are pressed and rolled into paper. These rolls of cardboard paper are converted into boxes or made into different cardboard products.



eco

How is Cardboard
Recycled?



- The cardboard is sorted and shredded
- Cardboard needs some preparation before it can be recycled. The first step is sorting the different boards, with a distinction being made between boxboard (single-layer, like a cereal box) and corrugated.



- The shredded material is then turned into pulp & filtered for any debris

- More water is added, at this point the mixture is around 90% water, so it is rolled and dried using steamers
- The sheets are then flattened and converted into new cardboard



Artist Research:

Charles Young

- Papercraft artist working in 200gsm paper to create miniature 3d sculptures
- Creates moving parts - spinning wheels, removable roofs, flickering lights etc.
- Creates Moquettes before creating a full colour model, similar to the process of creating our shoes



Artist Research:

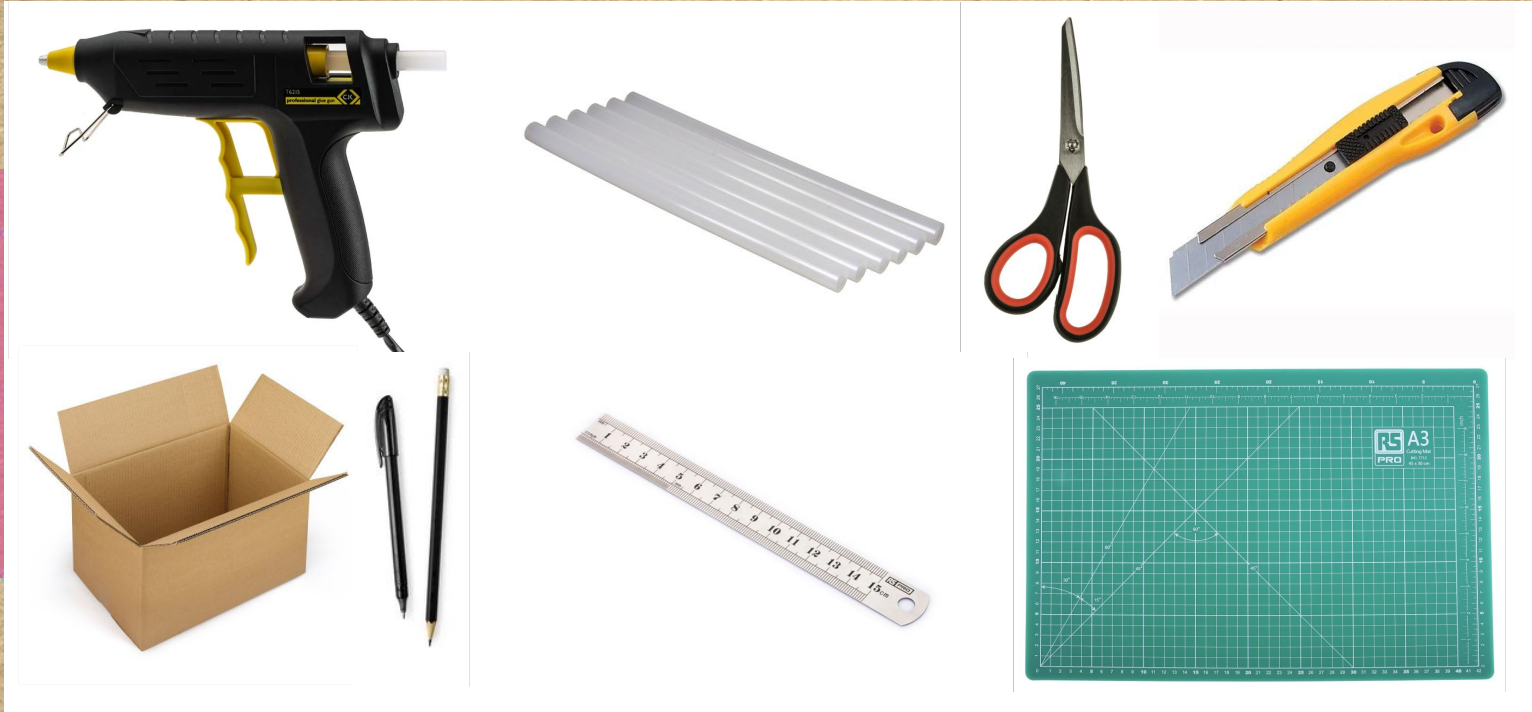
Chris Gilmour

- Large gap between price of material vs quality of final product
- Works only in cardboard to create life size sculptures with movable parts - engines, wheels etc.



Materials List:

Cardboard in the classroom



Health & Safety:

Cardboard in the classroom



- Using a glue gun:
 - Station(s) should be set up for students to come up and use the glue gun, do not have a glue gun at each desk as there is a chance to hit off it, knock it over etc. These stations should be clearly labelled with the word 'HOT', and a talk & demo on how to use the glue gun should be shown to students before beginning

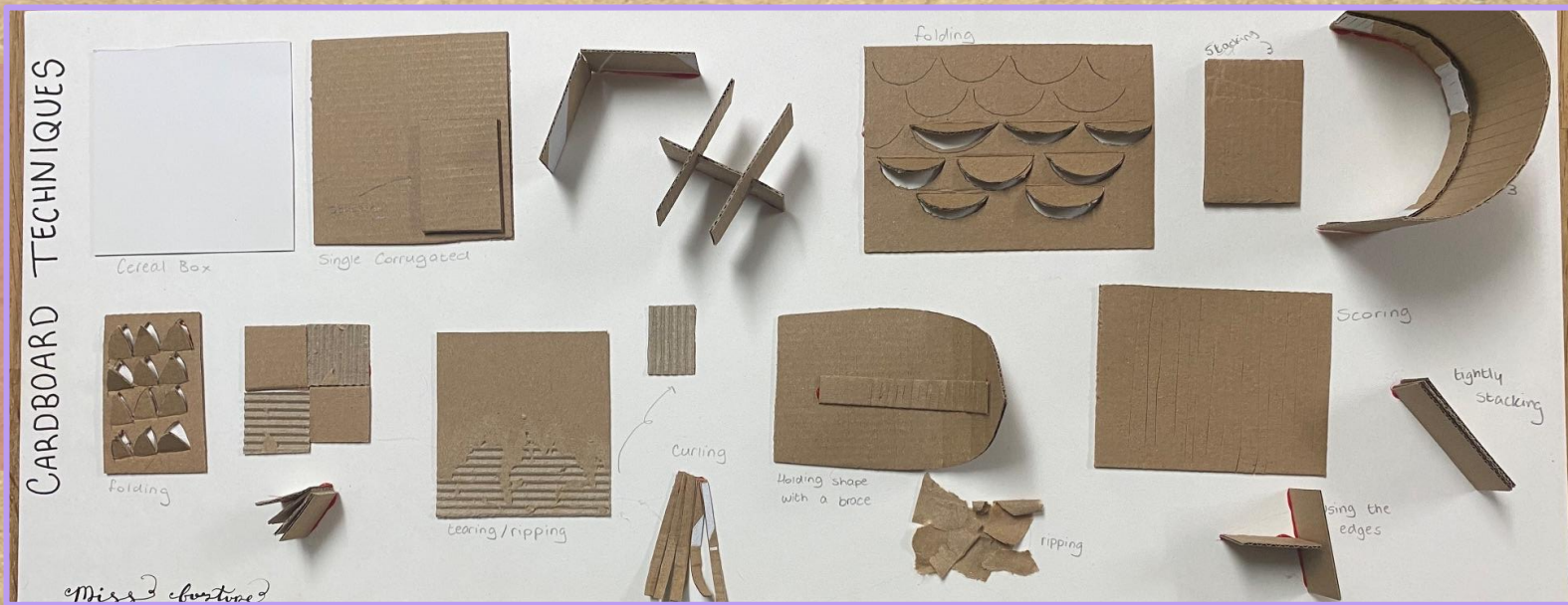


- Using a box cutter / blade
 - With some classes, using a scissors instead of a blade would be advisable.
 - When using a blade, show students a demo on how NOT to hold the blade. Remind them to place their hand in FRONT of the blade, not behind it. Re-iterate the importance of this as they can cut themselves severely



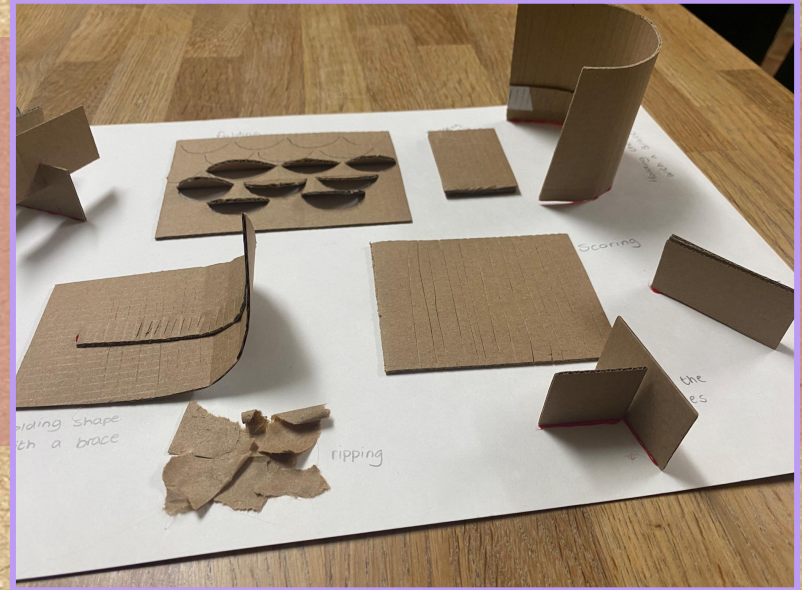
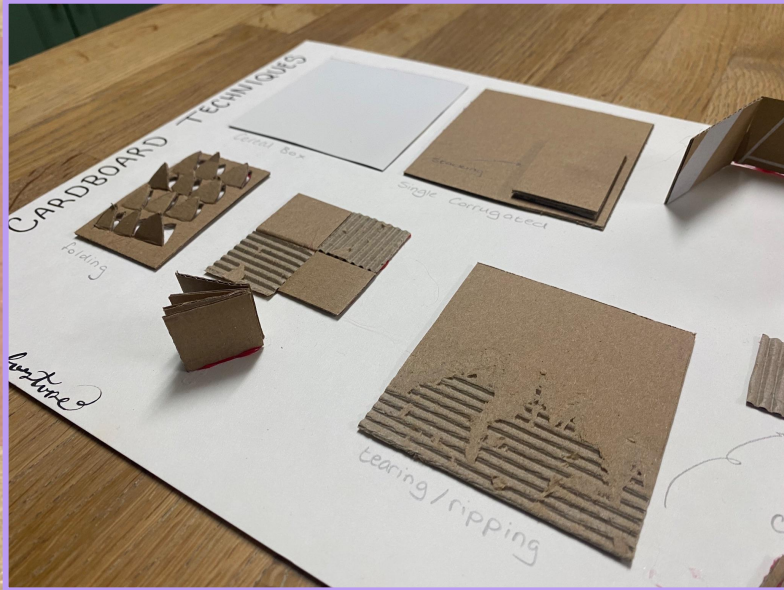
Cardboard Construction Process:

Cardboard Techniques Visual Aid



Cardboard Construction Process:

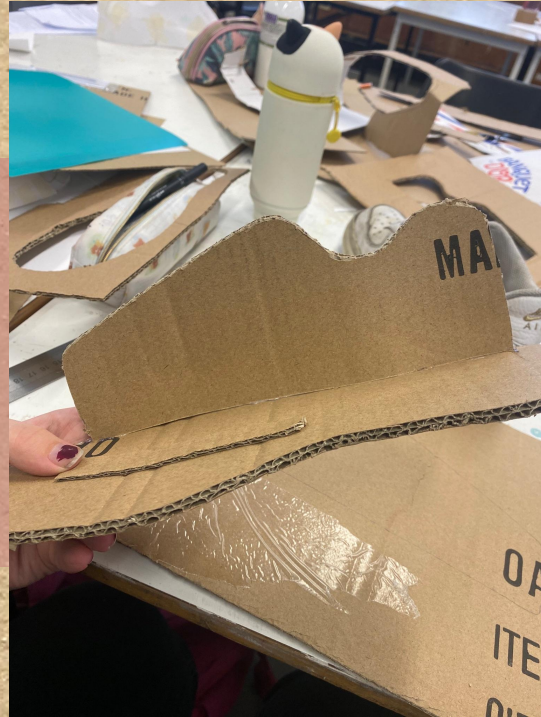
Cardboard Techniques Visual Aid



Cardboard Construction Process:

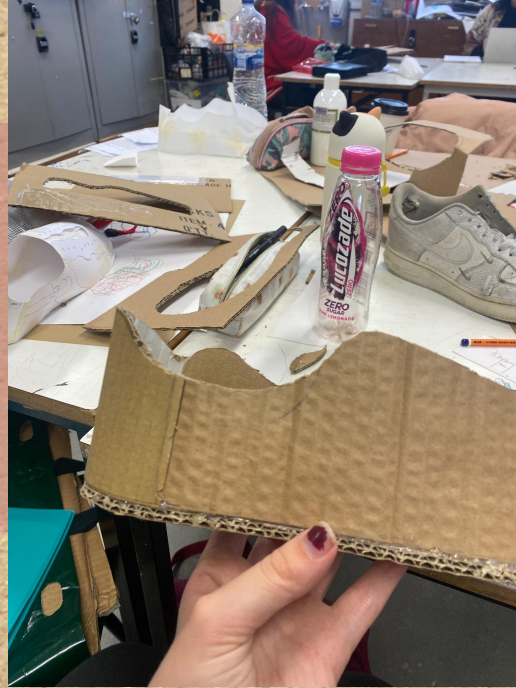


After creating my maquette I decided to use a hammer to create a new toe piece by flattening the card



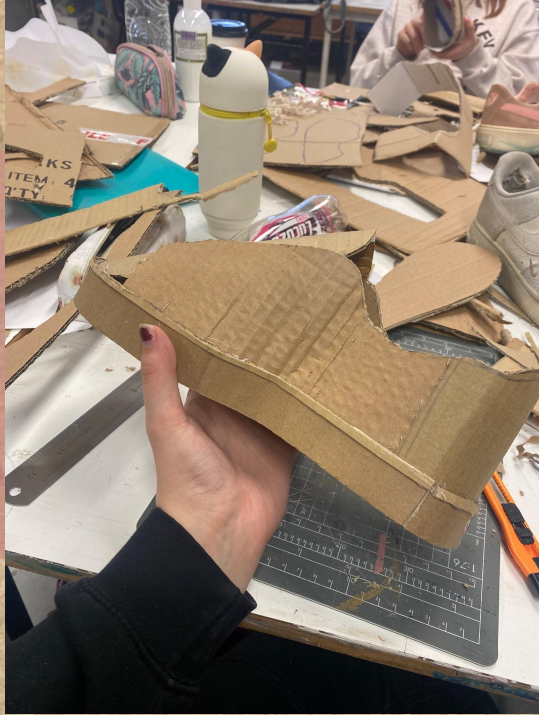
Joining using scoring & glue

Cardboard Construction Process:



Further construction of sides & toe piece

Cardboard Construction Process:

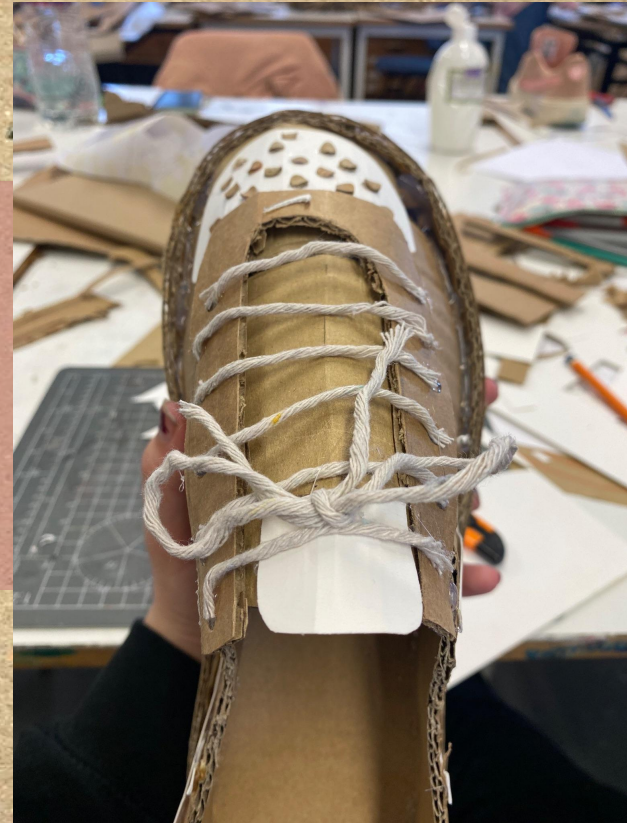


Adding detail with thin card

Cardboard Construction Process:



Fine details - laces, dots on toe
Cap, nike logo etc.



Final Construction:

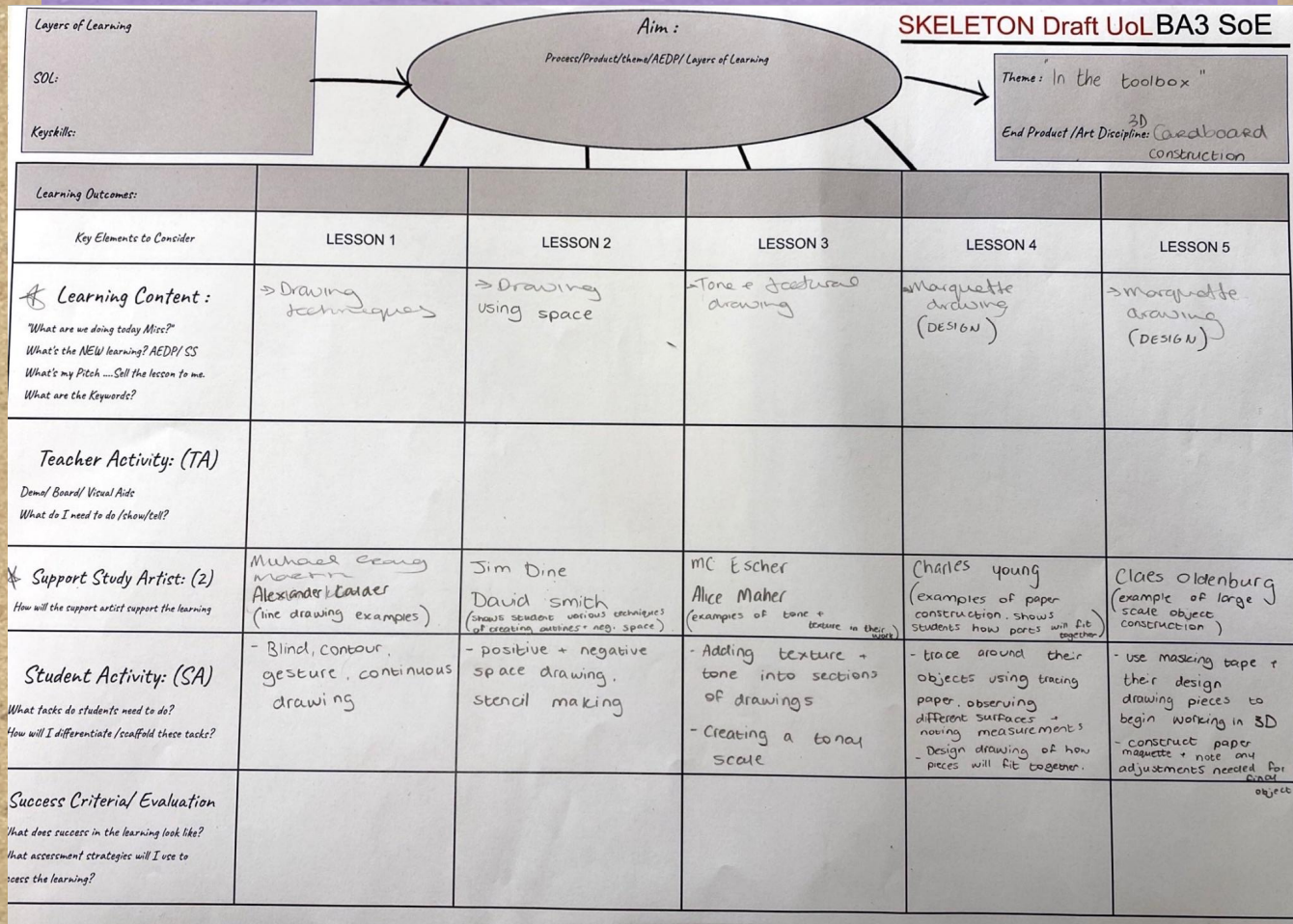


Final Construction:



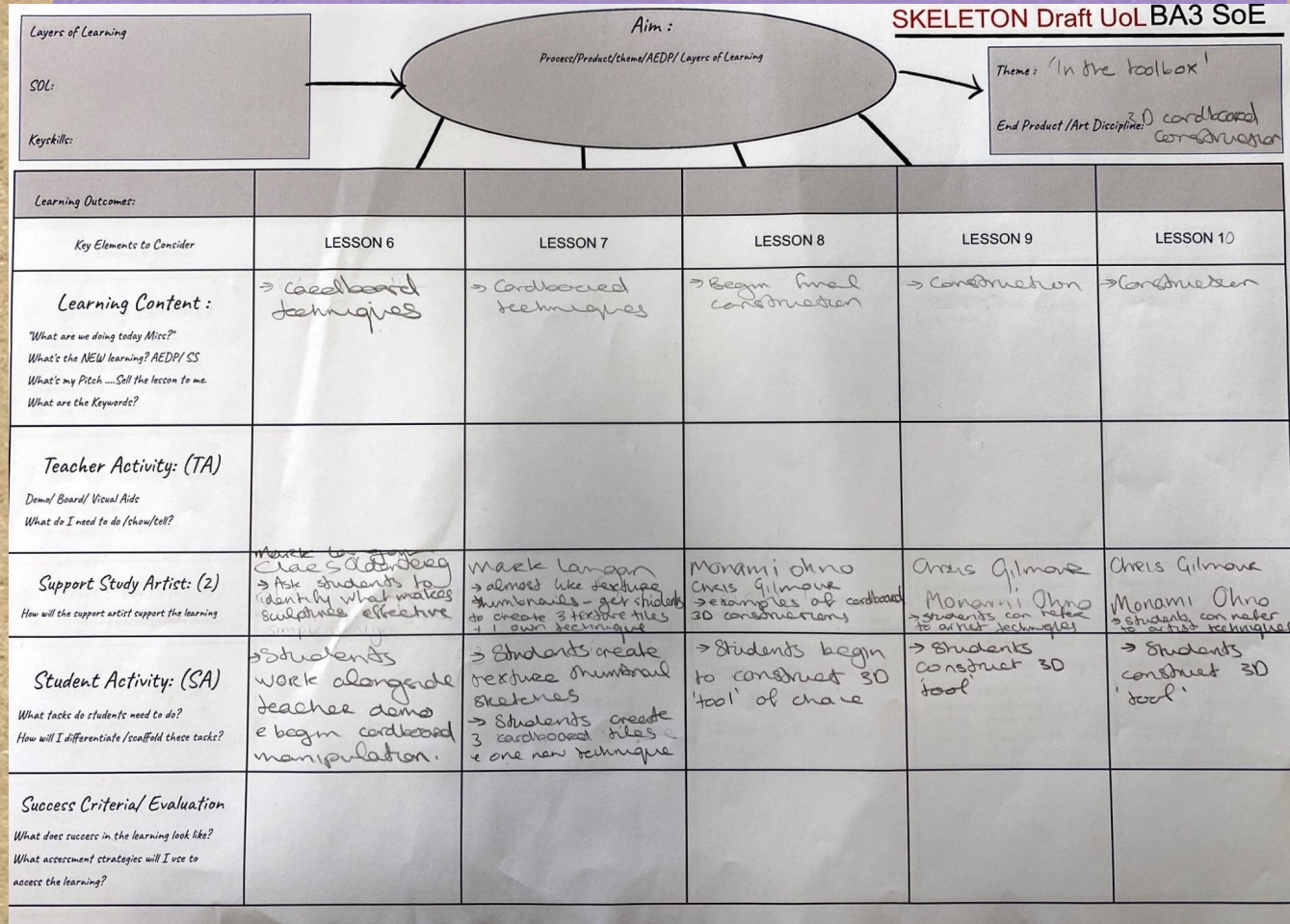
Translation into the Classroom

Alex Fortune & Kitty Bentley



Translation into the Classroom

Alex Fortune & Kitty Bentley



Translation into the Classroom

Alex Fortune & Kitty Bentley

UoL Theme:
'In the Toolbox'

