# Digital Notebook 3D Cardboard VAC



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#### 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"







#### **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 safet**y 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:**







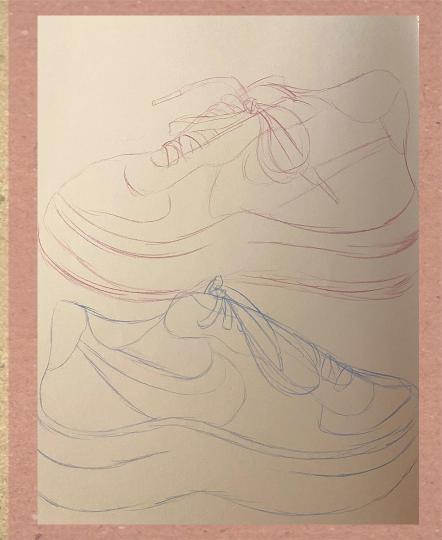
Source Object

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





#### **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



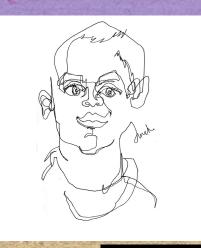




#### **Allison Kunath**

- 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

#### **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

#### **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:



#### - Main Structure:

Heel
Toe Cap
Insole
Outsole

#### - Additional Parts

Upper
Eyelets
Quarter
Vamp
Lining
Tongue
topline
top edge

### **Anatomy of my Source Object:**



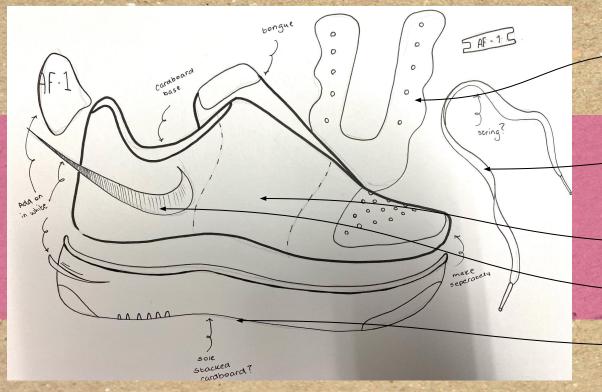
Heel
Toe Cap
Insole
Outsole

#### - Additional Parts

Upper
Eyelets
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## **Design Drawing:**



Deconstructed sketch of source object

Eyestay - to be constructed separately and glued on

Laces considering both paper & string as a possible material

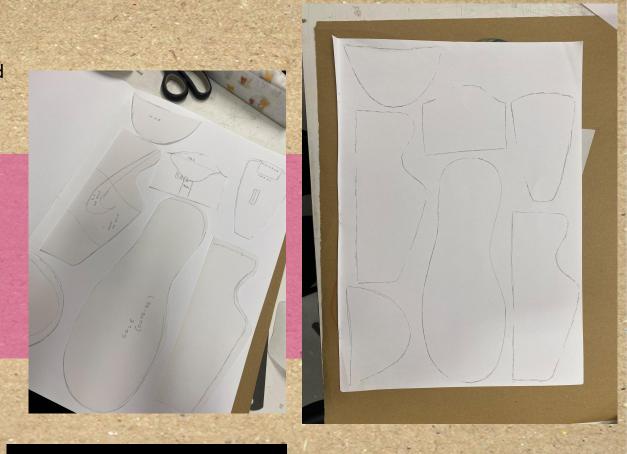
Main body

Details - made in lighter gsm white card

Platform & sole constructed to add height to the shoe

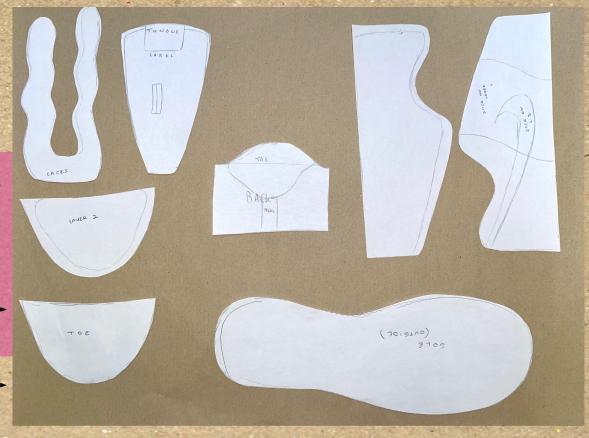
# Design Plan:

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:

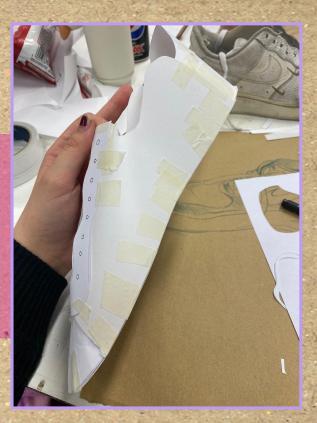
I then took these tracing paper sketches & traced around them onto a thicker Paper to create a design plan/pattern



### Paper Maquette: Initial construction using my pattern





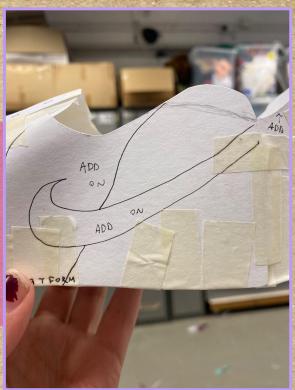


Using masking tape to join pieces - on both inside & outside of maquette to improve structure

### 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



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.

- the trees are cut and lumbered to create tonnes of logs which go through a machine to be debarked and chipped.
- These chips are then put through one of two processesmechanical 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.



# 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

#### **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







#### **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



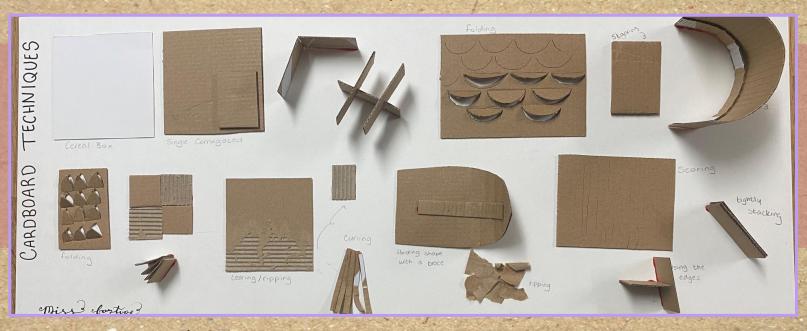
 Be aware of where the first aid kit is in the classroom, and also who are the designated first aid staff members in case of a serious accident

- 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

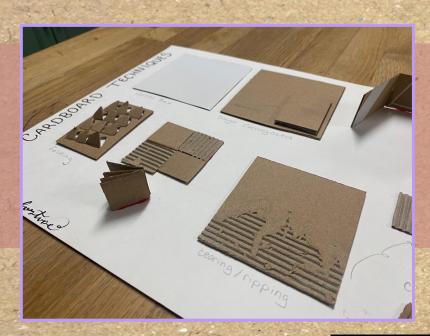


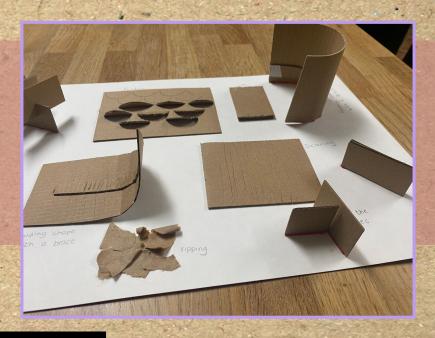
- Using a box cutter / blade
  - With some classes, using a scissors instead of a blade would be advisable.
  - -When using a blade, show students a demo on how NOT to hold the blade. Remind them to place their hand in FRONT of the blade, not behind it. Re-iterate the importance of this as they can cut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

Cardboard Techniques Visual Aid



Cardboard Techniques Visual Aid







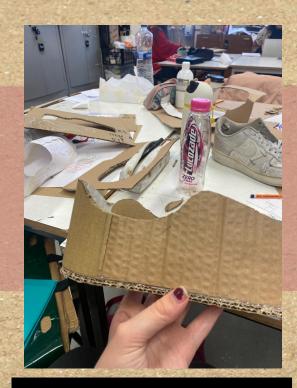




After creating my maquette I decided to use a hammer to create a new toe piece by flattening the card

Joining using scoring & glue







Further construction of sides & toe piece







Adding detail with thin card



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



## Final Construction:







## Final Construction:





#### **Translation** into the Classroom

Layers of Learning  SOL:  Keyskills:	<b>\</b>	Aim : Process/Product/Cheme/AEDP,		SKELETON Draft Uol BA3 SOE  Theme: In the toolbox "  End Product / Art Discipline: Gradboard Construction	
Learning Outcomes:					
Key Elements to Consider	LESSON 1	LESSON 2	LESSON 3	LESSON 4	LESSON 5
Learning Content: What are we doing today Miss?" What's the NEW boarning? AEDP/SS What's my PitchSell the lesson to me. What are the Keywords?	» Drawing technologues	Drawing using space	tone & Jactural arowing	envarquette ardising (Desion)	drown (DESIGN)
Teacher Activity: (TA) Demol Board/Viewal Aids What do I need to do /chow/cet?					
Support Study Artist: (2) How will the support artist support the learning	Alexander Lander (line drawing examples)	Jim Dine David Smith (Smalls student voticus exemiques of protein autinos men. space)	MC Escher Alice Maher (examples of tone + texture in their)	Charles young (examples of paper construction . shows students how ports register	Class Oldenburg (example of large ) scale object construction)
Student Activity: (SA) What lacks do students need to do? How will I differentiate/scalfold these tacks?	- Blind, contour, gesture, continuous drawing	- positive + negative space drawing, stencil making	- Adding texture + tone into sections of drawings - Creating a tonay scale	trace around their objects using tracing paper, observing different surfaces noting measurements obsign drawing of how precs will fit bookenen.	their design tape of their design drawing pieces to begin working in SD - construct paper magnetic to note any adjustments needed for
Success Criteria/ Evaluation What does success in the learning look like? What acsessment strategies will I use to seess the learning?					Onlyett .

#### **Translation** into the Classroom

Layers of Learning  SOL:  Keyskills:	Aim: Process/Product/Chemb/AEDP/ Layers of Learning			Theme: In the hoolbox Conditional Conditional		
Learning Outcomes:						
Key Elements to Consider	LESSON 6	LESSON 7	LESSON 8	LESSON 9	LESSON 10	
Learning Content:  What are we doing today Miss?  What's the NEW harning? AEDP/SS  What's my PitchSell the lesson to me.  What are the Keywerds?	> caedboord tehniques	- Cardborned techniques	> Begin mel	> Conformetion	>(on Concore	
Teacher Activity: (TA Demol Board/ Visual Aids What do I need to do (show/tell?						
Support Study Artist: (2 How will the support artist support the learning	identify what makes	mark langur almost like texture thimbonails - get shidely to create 3 texture tiles	Monanijohno Cheis Gilmpue Seromples of cordbook 30 constructions	Monary i Thro Honory con refer to arrist consider	Monami Ohno	
Student Activity: (SA What tacks do studen's need to do? How will I differentiale /scaffold these tack	teacher dono	Scholart create texture humbrail sketeres > Students create 3 cardhoosed thes 4 one now rethrighte	> Students begin to construct 30 'tool' of chare	-> Students Construct 30 fool	> Students construct 30 'tool'	
Success Criteria/ Evaluation What does success in the learning look like? What accessment strategies will I use to access the learning?						

#### **Translation** into the Classroom

UoL Theme: 'In the Toolbox'

