Scenic Construction

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The Work shop



This is the work shop in Carmarthen where we learned to use tools safely. As you can see there are many work benches and tools

This is Dave he explained the importance and how to use machines safely



Safety equipment





The machines

Here are some of the machines that we were taught to use.

A chop saw, is a circular saw (a kind of power tool) which is typically used to cut hard materials, such as metals, tile, and concrete.





This is a jigsaw Jigsaws are best used for cutting shapes and curves in wood with its narrow blade

Nail gun purpose: to drive nails into wood





Air ' compressors have many uses, including: supplying high-pressure clean air to fill gas cylinders, supplying moderate-pressure clean air to a submerged surface and supplying moderate-pressure clean air

THE MOST IMPORTANT THING IN A WORKSHOP IS THE EMERGENCY STOP BUTTON. If someone is in difficulty before seeking help, in the words of the Sugababes, PUSH THE BUTTON! all machinery will immediately stop.





Making a canvas Broadway flat.

What are Broadway flats?

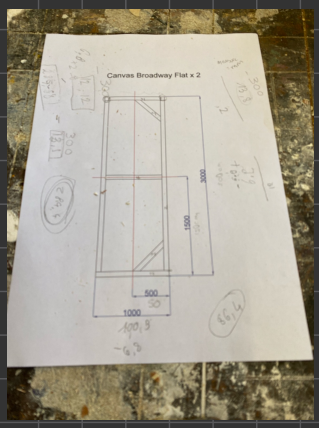
I Study the plan out calculate mesurements

II Measure the wood then cut it using the chop saw, not forgetting to mark the side that you want to quite.

III Once all the wood is cut lay it out on the floor and start gluing it and fixing using the nail gun

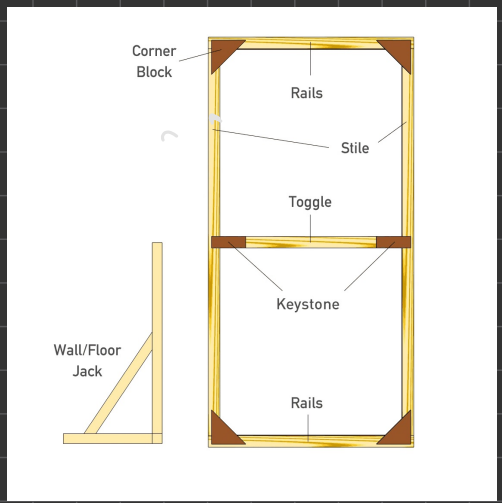
IV Constructed from white stretched canvas applied to a wooden frame

V Voila you have made a Broadway Flat









What you need











Making i Hollywood flats

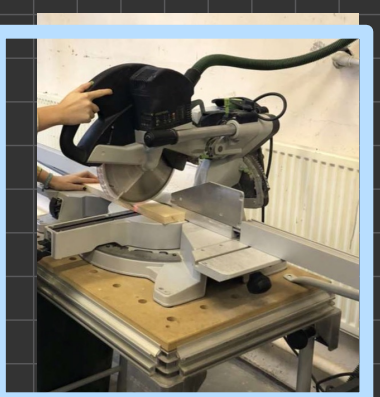
What you need











What is a Hollywood flat?

Constructed out of plywood Hollywood flats can stand freely from the ground on a portable base.



I Study the plan and calculate measurements

II measure the wood then cut it with the chop saw. Don't forget to mark which side that you want to cut

III After cutting the wood lay it out on the floor and start gluing then fix it with the nail gun

IV Cut a large piece of wood and place on the frame. Attach it using the glue and nail gun and wipe off any excess glue

V Voila you have your very own Hollwood Flat '

Study talk

Research how treads are made for theatre. Consider form and function.

- Are all treads built in the same way?
- What are the safety regulations for the use of treads i.e. where does the critical angle come into play and why is it so important?
- Is the use of handrails necessary?
- What is important about tread and riser sizes?
- How do you stop noise?

Make sure you show references to sets and scenery that use steps or treads.

There are a number of different styles of tread:
Mid flight treads.
Straight or flier.
A standard oblong shaped tread. used in a straight flight.
Diminishing flier.
Set into the straight section of flight before a turn, with one end narrower than the other Used to change the pitch of the handrail before a 180° turn.[2]
Winder.
wider at one end, used to turn the flight.
Kite winder.
A quadrilateral shaped tread, used in the corner of a turn: hence the kite name.
Feature or starting treads.[3][edit]
These treads are used to embellish the start of a flight of stairs, they may have either a straight front to them or a commode/ curved front to enhance them further.
Curtail.
An ornate tread that follows the spiral of a volute handrail, the back of the tread will cut into itself and then return along the flight.
Bullnose.
A straight tread with the front corners rounded off.
"D" ends.
So called as they look like a D shape attached to the end of the tread. A common style that may be carried up the flight for a number of treads.
Tower.
The tower feature is a cylindrical addition to the front corner of a tread, intended for setting a newel post onto, the tower may be positioned dependent on the handrail termination.
Commode front.
The addition of a curve to the front of a tread to create a more decorative feature.

https://en.wikipedia.org/wiki/Stair_tread

The use of a handrail is necessary depending on the height "they are required in many public and commercial areas. In fact, any open-sided walking surface more than 30 inches off the ground necessitates a guardrail."

https://mmcfencingandrailing.com/importance-of-railings-for-safety/

How to stop noise on trends well I would say I'd lay carpet down but it's not possible to copy everything this bit of stairs and every show we do .

You can use acoustic isolation around stairs walls and under the stairs this will reduce noise or enclose the stairs and avoid creating an echo chamber

https://www.soundproofingcompany.com/soundproofing_101/watch-out-for-the-stairs-when-soundproofing

All rises should be going in the same direction for both comfort and safety reasons.if they're low rising the way you place your foot can become quite dangerous and you're more likely to slip or fall. "A low riser will place the foot back so far that when the opposite foot attempts to clear the surface below, the heel will become caught on the tread surface."

http://www.arden.net.au/resources/Articles/Stair-Safety-Overview---Size-of-risers-and-treads.aspx

Study talk

Explore what materials you can use to clad scenic elements that need to be three-dimensional. You should explore the use of protective coatings and why they are necessary

Protective coating for longevity painted over sets or props it also helps keep the moisture it also helps keep the paint secure

Study Task:
What are the benefits of using metal to build scenery? Show at least three examples to illustrate your answer. This means that your answer should not just be a picture but be accompanied by notes/research.

Metal is the perfect solution if you are wanting to create a long-lasting , low maintenance set.

Metal is tougher and stronger. it will withstand heavier weights. If it required someone to climb on it metal would provide enough support.

By creating a long lasting, potentially reusable metal set. It lowers costs.



This is from the Broadway show Newsies

the designer realised that he had a quite and a lot of characters all tap dancing which could be problem. he knew that he couldn't construct something too elaborate which would need a lot of space. So he came up with the idea of three towers that can easily be moved backwards and forwards. This would make more room, create layers to give more space.

This set isn't fully made out of metal it's half metal half wood and then the wood is painted to look like metal

The set design I chose combines old New York and present day New York. The designer used fire escapes, scaffolding and metal architectural structures from the industrial revolution as inspiration. The image that most inspired them was an open space printing office with no brick walls, just steel and a glass skylight. They began to develop an idea along this theme incorporating the metal letters found on a printing press.

Tobin Ost is the Set Designer who was Tony nominated for this work

Perspective Drawings

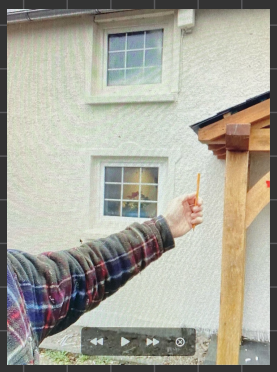
this is that weird period when lessons zoom are back



"Perspective is what gives a three - dimensional feeling to a flat image such as a drawing or painting. In art, it is a system of representing the way that objects appear to get smaller and Closer together the father away they are from the viewer" (by Helen South in may 06 2019)

Effective perspective

1 eye level
2 trigger catalgetget - leg box
3 measurement
(4) relationship between box and eye level

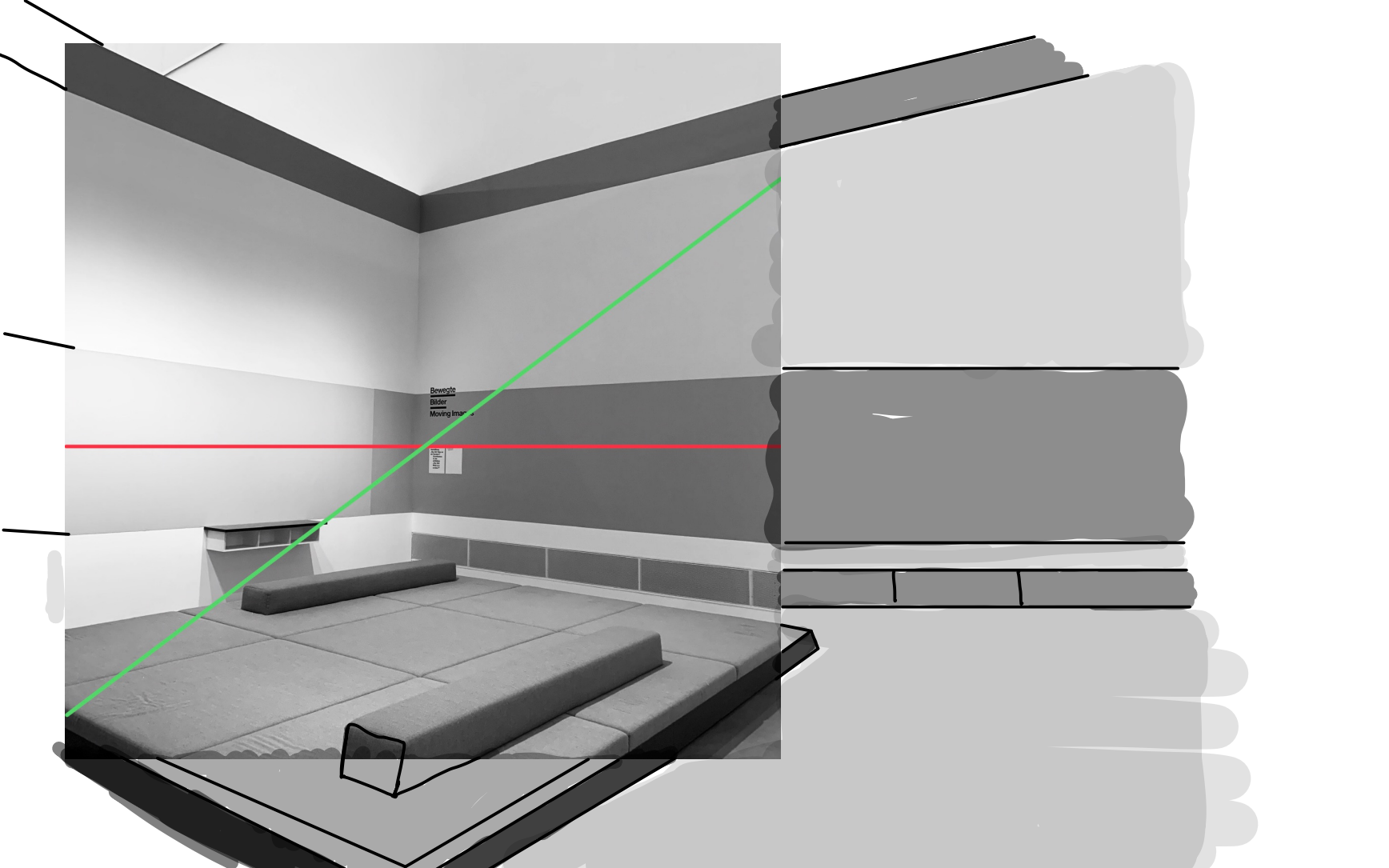


Eye level determines the perspective





On the next slide we have the task of task to try and practice our perspective


Bewegte
Bilder

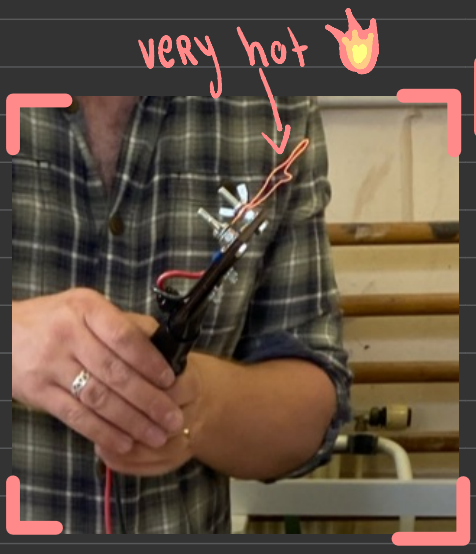

Don't trust anybody who doesn't have a sense of humour!

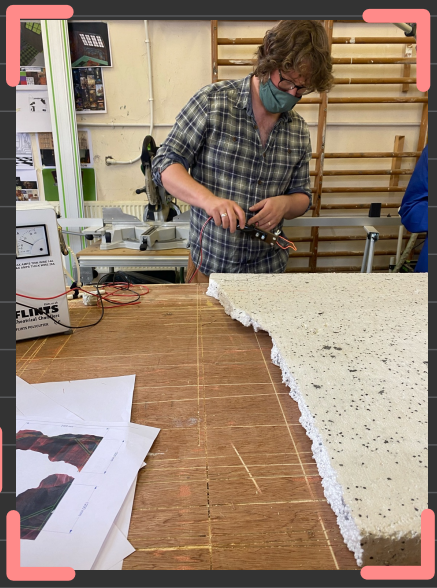

WE'RE
BACK!

At last we are back in the workshop! We begin by familiarising ourselves again with the machines, we spent the first morning practising cutting wood on the chop saw etc

Two new machines that we hadn't used before had arrived so we had a go at those



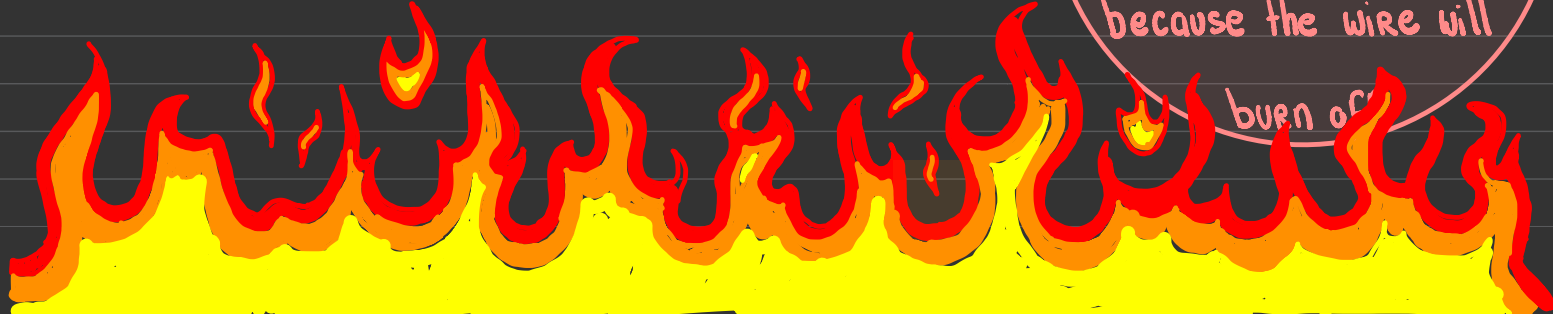




To the first the machines that we tested... it was in a mysterious white box. Turns out its a polystyrene cutter. by heating a copper wire it literally melts the polystyrene, very satisfying, watching it turn into a an ice cream consistency.

I will be using this for our cave making project but I will talk more about this later.

note to self do not turn the machine higher than 2 or 3 because the wire will burn o







The second new machine is a new chop saw.

This brand of machine has a great safety feature which the blade senses if it comes into contact to anything like skin or that doesn't feel like wood or metal. the saw immediately retracts into itself minimising injury.

Dave had of been asked to create this set for scene in a TV show. Sadly it was later cancelled and the scene cut out but he thought we'd be interested in doing it.



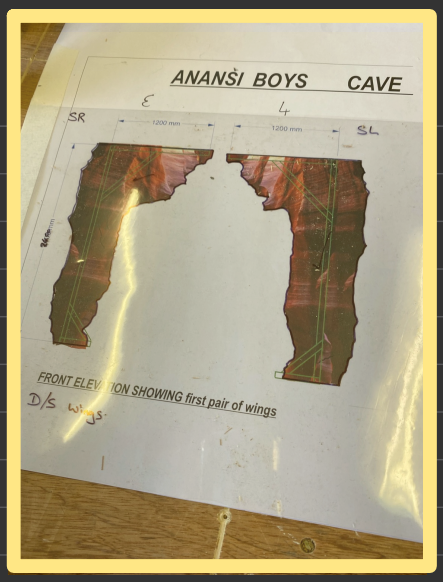


He even sent us the initial requests from the clients, which explained in more detail what they wanted.

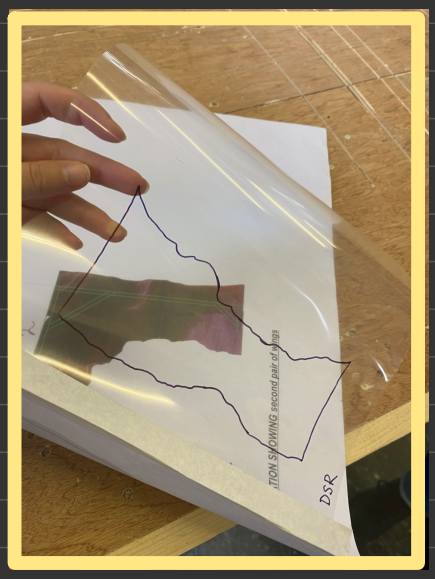
The papers showed image references and measurements.

The set was a cave design. We split into four groups and each created a different element to the cave

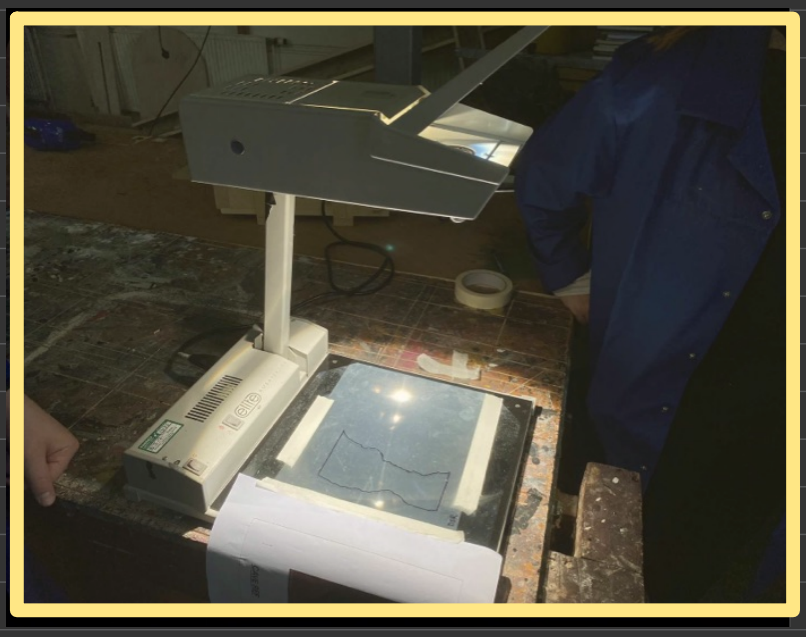
I was in a group with Vanina Beth and Ellie



Our group was given the task to create the left wall of the cave. we had a reference image of what they wanted and Dave explained to us how to do it in simple steps. Firstly we used transparent paper to trace the clients design. Once it was traced we projected it onto our piece of wood then all we had to do was trace it onto the wood



Using this system made everything much faster. we already had a clear line so we knew where everything was going to be situated. If I had to do work like this again and a client was asked where I got this line I could show them straightaway it's from the image they sent me.





Once we had traced the shape we used the jigsaw cutter to cut out the lines

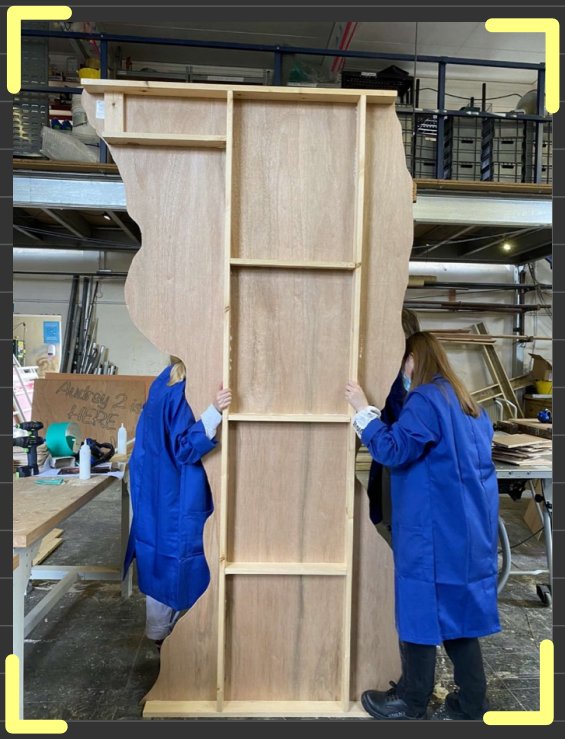


The plan was to cut out the shape, add in the flat then the polystyrene. Using the magic melty machine we carved a cave like silhouette.



We cut out the words to be able to put behind okay that line so they would be flat and keep everything steady and strong we screw those in and then with the help of the nail gun we nailed it down also



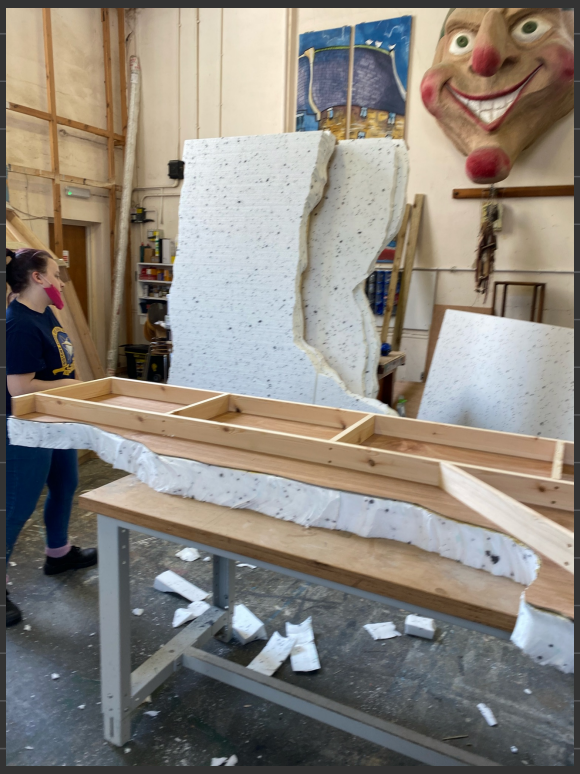


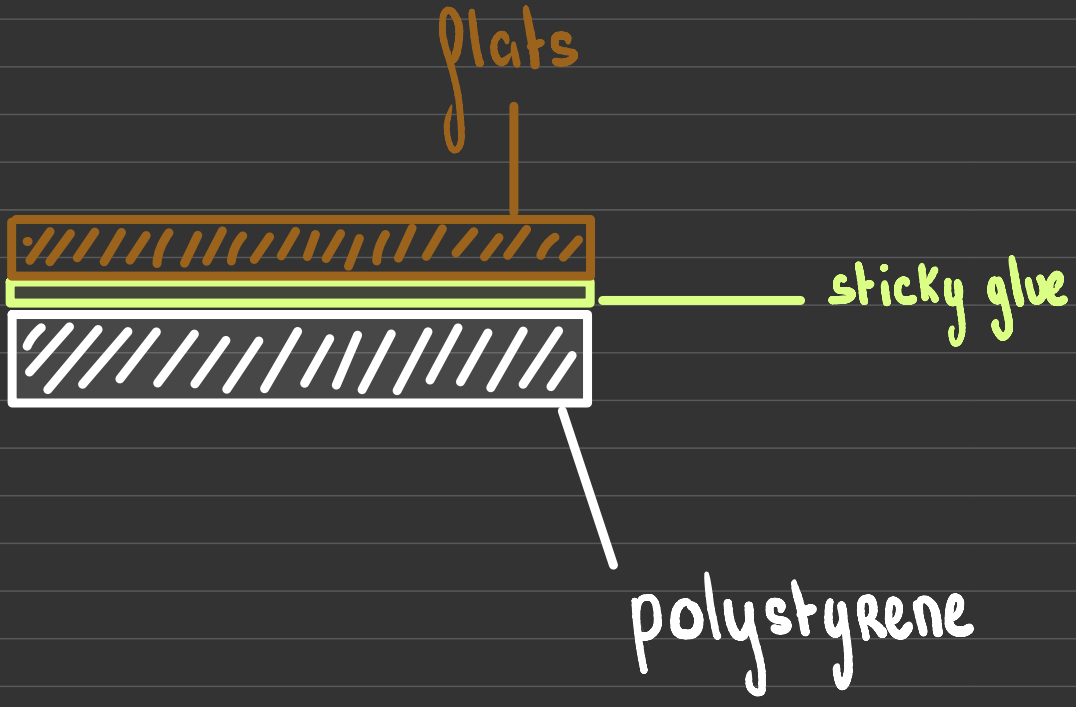
So here we have it (almost) finished Still missing the polystyrene but we would add that later. We have all the flats which is holding everything steady and making it stronger and then we have the outline.



We then added layers of polystyrene, cut out the shape and then use the hot wire tool (magic melty machine) to cut it to the exact size and put it on top of the flat

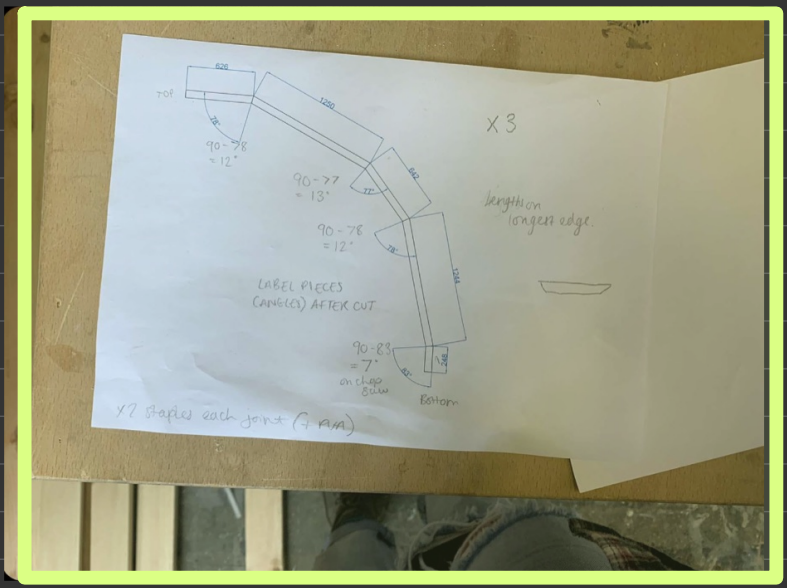
To hold thing together we used glue a special sticky “snot like” glue.







Once we have finished the beginning of the cave we were asked to make three oval-shaped flats





we had five individual pieces that we had to cut to different measurements and different angles. To check the angles are correct and the right shapes should they fit together and create an over arc.

To be honest I didn't enjoy this part. I think we were overconfident s and knew what we were doing. We started making two at the same time which was a disaster as our maths skills weren't as good as we thought they were. It took us a while to understand what we were doing wrong and how to fix it. We were incorrectly cutting the angles on both sides at different lefts and rights when we needed both angles to be inwards for them both to go left to right



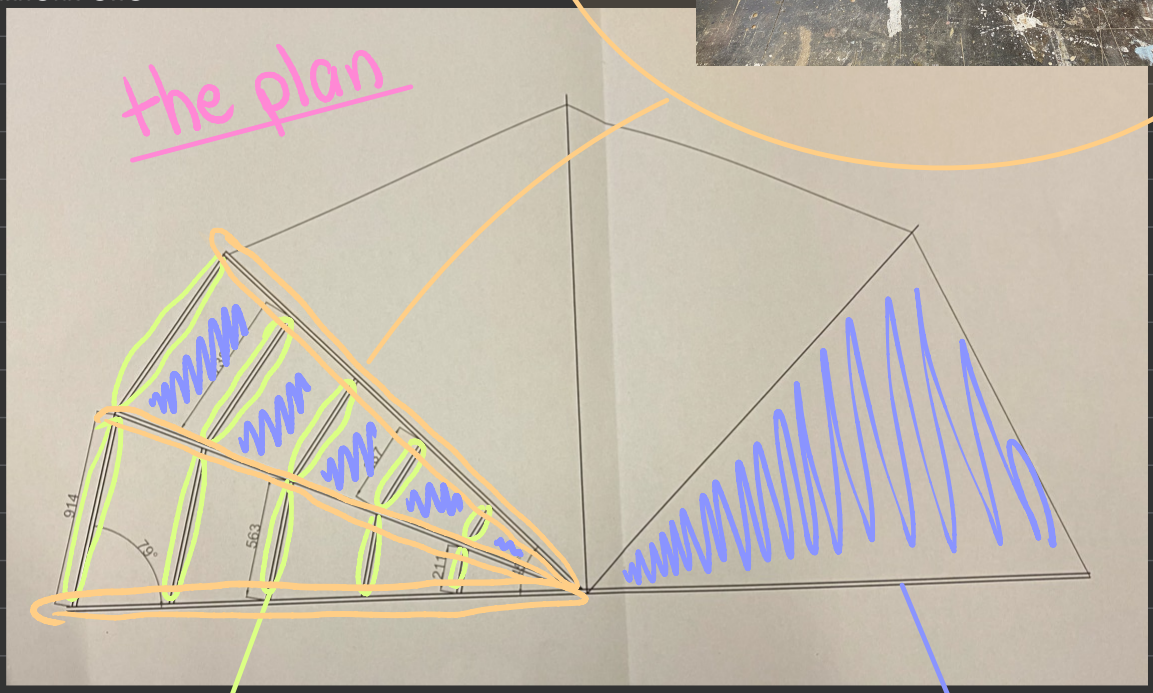
Once we understood our mistake we began to make progress. We slotted all the pieces together then glued and nailed it using the nail gun. We added the small squares by that measure 200mm x 200mm to where we had previously nailed and stuck the wood. We trimmed and sanded the edges make it look smooth giving it a better finish.



Next step in making the cave was to create semicircle pieces using the arced flats we already made

This is where we used our three arc shaped flats and then added the small piece of of wood to create a small triangle/ semicircle



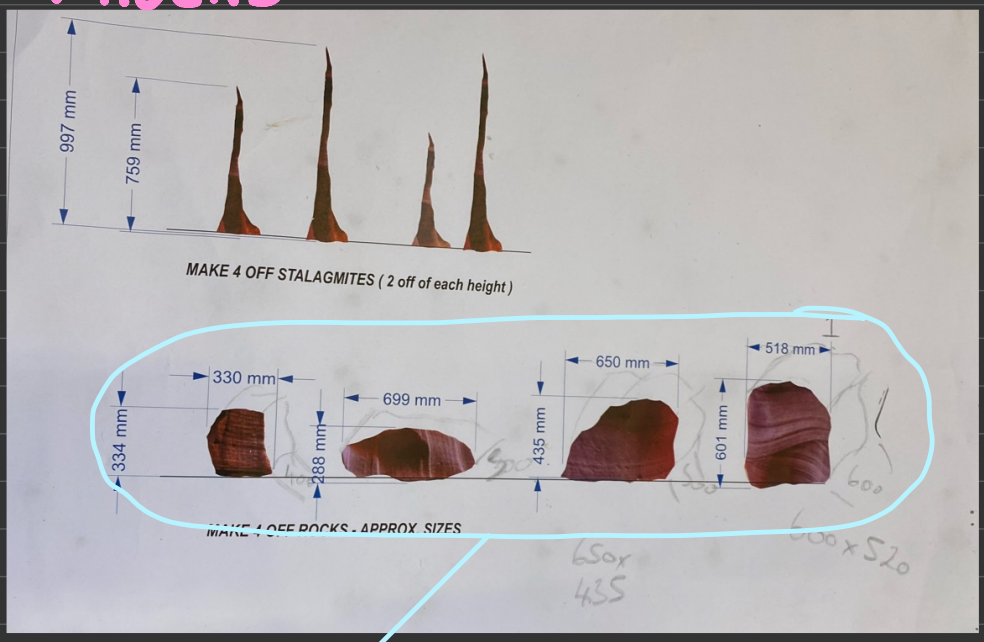






To finish we added a layer of plywood to each segment. This was quite tricky as we had to make sure measurements were accurate even the slightest discrepancy wouldn't fit the shape. Although this was very fiddly and time consuming I finally learnt how angles really work.

MAKE 4 ROCKS



We were tasked to make four rocks all different sizes from polystyrene. first we cut the polystyrene to size, then glued them and put weights on it







I drew a rough shape of a rock and used the wire cutter to cut, painfully slowly, the shape.

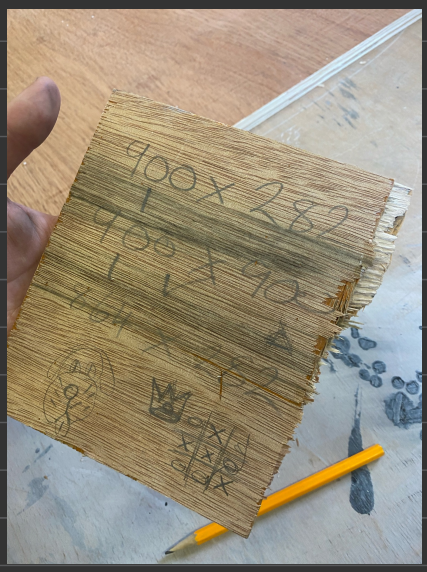
Making four different sized boxes.





We began by cutting the wood to the right size then glued it together. Using the nail gun to secure it.







Research the difference between first angle and third angle orthographic drawings. Find example to illustrate you answer. Also find an interesting set to talk about in our online session on January 12th.

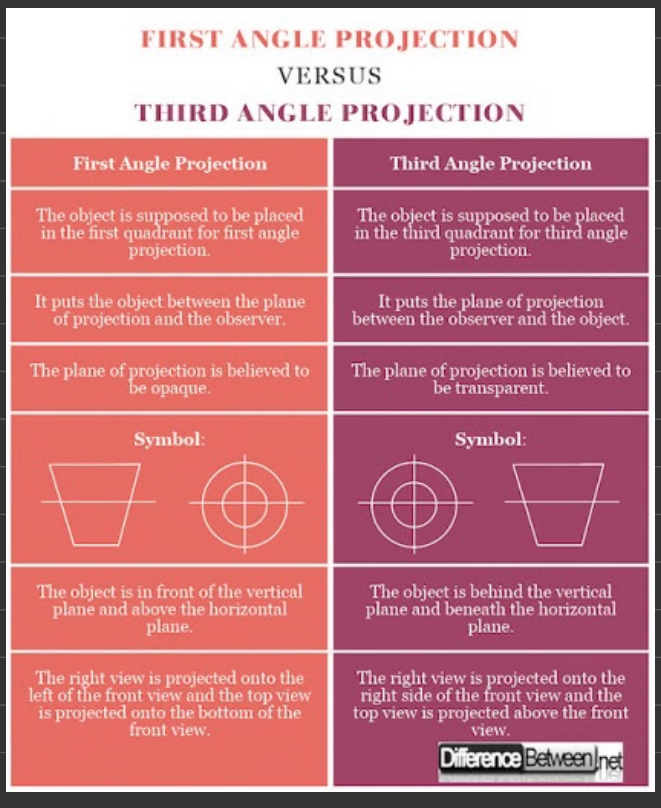
What is first angle projection it's a most common method used to get engineering drawings are mostly for orthographic projection which is a graphical method use to represent Three-dimensional structures or objects

The orthographic view typically consist of TopView front use and the side view view

I what is third angle projection it's similar to 1st angle projection the main difference is it's projection method also used to represent three-dimensional objects but using a series of two-dimensional views

So from what I understand the difference is the position of the plan front and side views

Also in Europe we tend to use first angle projection but in United States and Australia they are more likely to use third angle projection



FIRST ANGLE PROJECTION

VERSUS

THIRD ANGLE PROJECTION

First Angle Projection	Third Angle Projection
The object is supposed to be placed in the first quadrant for first angle projection.	The object is supposed to be placed in the third quadrant for third angle projection.
It puts the object between the plane of projection and the observer.	It puts the plane of projection between the observer and the object.
The plane of projection is believed to be opaque.	The plane of projection is believed to be transparent.
Symbol:	**Symbol:**
The object is in front of the vertical plane and above the horizontal plane.	The object is behind the vertical plane and beneath the horizontal plane.
The right view is projected onto the left of the front view and the top view is projected onto the bottom of the front view.	The right view is projected onto the right side of the front view and the top view is projected above the front view.

← Here are some Comparison

Find and research 3 different interesting sets. Consider your own personal artistic preferences and also the techniques you have learned so for in this module.

HADESTOWN





There's a very interesting video on YouTube where the set designers talk about how they created the set of Hadestown and where the idea came from.

The Set Designers agreed that they wanted the audience to imagine that the bar was actually the bottom of a steel drum with a rusty steel look.

In the production Hadestown characters travel to the underworld. To explain the travel element they added a turntable.with three circles turning in alternate directions . The smallest one in the middle can also descend to go under the stage. This was the best way to show charathers they walking or sinking into the underworld.

I love this setand the way they've incorporated the metal and wood.

There is a spiral staircase at the back which is metal. This is brand-new but after sanding, adding coats of paint and rust effect it gave it a rustic worn look which fits with the set.



I wouldn't make any big changes but I would like to add some details in particular the
I would just add some more details such as the ceiling lights. I would like to have seen more, they only appeared in one scene but I think there was place for them in other scenes.

Here are the links to a couple of great YouTube videos, i particularly like the one where they construct a model of the turntable

https://youtu.be/mCWZsq6TIUY

https://youtu.be/qx-M_P686Zw

Beetlejuice

So here we have Beetlejuice the musical set.



Another great thing about the set and it's the reason I want to talk about it is that it transforms each time there is a character change. When I say it transforms I mean EVERYTHING. The light fixtures, door railings, every single surface, the furniture, the walls literally everything.

In this set the set designer wanted everything to be very controlled and the palette to be very similar so there only four different colours used in the entire set

I find this set so interesting. Not just the layout but the way the house is awkwardly built. It seems there are no straight lines, if you look at the fireplace you can see that it's all cut slightly askew.





To show Beetlejuice's world the designer wanted the colour palette to really represent Beetlejuice. so the moment the Beetlejuice start haunting the house The whole set transformed to Beetlejuice world represented in black grey and white with nightmarish shapes and images. If you look at the image the sofa is actually a trampoline

During the production a new family moves into the house. The Set Designer wanted simpler colour scheme using only couple of colours, nothing too bright

Once on this island



As soon as you set foot in this set you are immediately in golfed

The stage and set is situated in the middle with the audience surrounding it. The seats are very close to the stage so the audience feels like they are participating. One end of the stage is covered in sand and there is a small pond where the water is repeatedly emptied and refilled. There is debris and rubbish everywhere which gives the illusion of the aftereffects of a storm.



During the performance is they even have live animals Such as a goat

THE STORIE

“Ti Moune is a fearless peasant girl who falls in love with a wealthy boy from the other side of the island. When their divided cultures keep them apart, Ti Moune is guided by the powerful island gods, Erzulie, Asaka, Papa Ge, and Agwe, on a remarkable quest to reunite with the man who has captured her heart. »

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