

Unit 8: Design Principles in Art & Design

Unit 93: Small Scale Design Unit 94: Small Scale Working

Design Brief

Rolex is a well-known brand of making high-end watches. These watches are at the high-end of the market as it is expensive to make, as the materials used include rare diamonds and skilled labour to create. They are a famous brand as they have been in the market for a long time.

Rolex derives from Switzerland originally created in London under a different name. The company moved to Switzerland after world war 1 to avoid heavy taxation. Its main catalouge of products is watches.

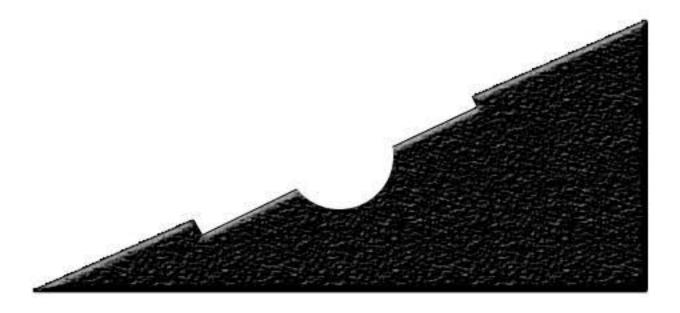
The aim is to create something unique which will also fit to the style of the Rolex brand. Sent in the post.

Phase One: Research & Portfolio Design – 24/02/2020 -15/03/2020

Phase Two: Concepts in 2D & 3D - 16/03/2020 - 05/04/2020

Phase Three: Final Design Refinement – 06/04/2020 – 19/04/2020 Phase Four: Final Design Presentation – 20/04/2020 – 11/05/2020

Phase Five: Completion of All Work – 12/05/2020



Primary Research

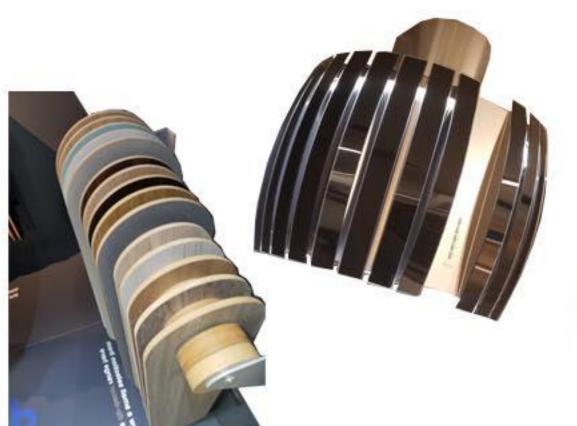
We went to Central London to get our primary research

When looking around for more products I saw a display showing the diffrent types of material you can get .

At first I thought it was a radiator but the reason it grabbed my attention was the way they were

layed out and could easily see each material.

The mechanism which made it turn gave me alot of ideas for my main product.





Primary Research When taking photos and inspiration I wanted to look at the shapes used and different techniques on how they could become smaller and bigger by putting the products into peices so it will fit in the packaging. I found alot of unique shapes and found someways products can be changed to fit in the packaging. Some of these products looked fragile so I wanted to see the best way fragile products can be protected during delivery to the consumer.

Primary Research

Our trip to Habitat, Heal's and the Business Design centre helped with my primary research.

There were a lot of products on display and we had to match it to our design brief so only some products could be used.

The others were used for product design ideas to see if they could be made smaller to fit the design brief.

The trip was used to help for inspiration for the ideas.



Secondary Research

ebay

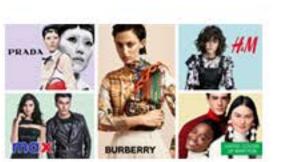
There are many websites to get any product you'd like. The most two popular are ebay and Amazon.

Both Amazon and Ebay are well-known due to the fact they have a large catalogue of products and they have a strong branding.

This means they have a large target audience as their products are so diverse.





































Secondary Research

<u>Costs</u>

As Amazon/Ebay have a lot of products the cost has to be reasonable for all.

The costs of each product vary as it depends on factors such as the quality of the product and the demand of it.

In addition to this, the material used will change the costs of it. For example, most plastic products will be cheaper than metal ones.







Secondary Research

Materials and size/packaging

Both Amazon and Ebay sell a high amount of products, therefore they would ned a lot of packaging.

The packaging varies from small to big and fragile or not.

The materials they normally use are cardboard boxes and tape, which can be recycled.

With their small packages instead of using a box they use cardboard envelopes which allows less boxes to be used for small packages.

They are efficient in the amount of packaging they use for each product generally, as they want to save us as much material as neccessary.. They also do this by putting products together in the same packaging if they are all being sent to the same address.











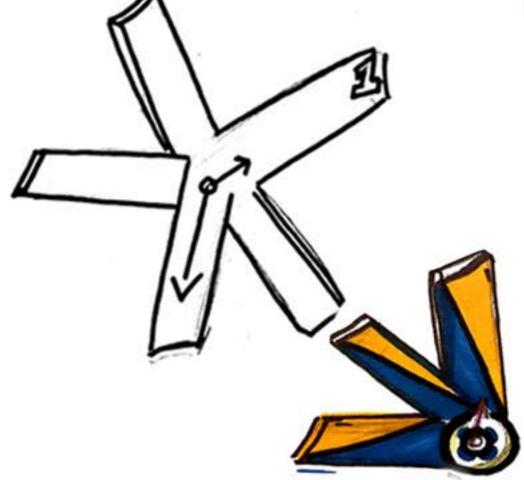




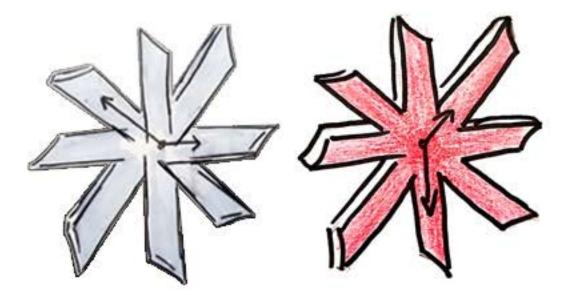


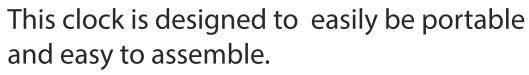


They add their Branding all over the packaging.









The mechanic allows it to fan out and open and easily close.

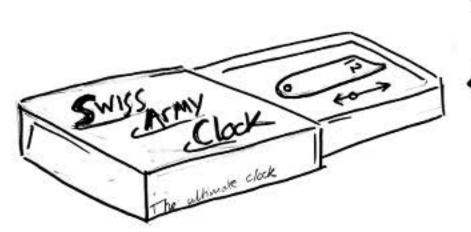
The stand allows it to stand.

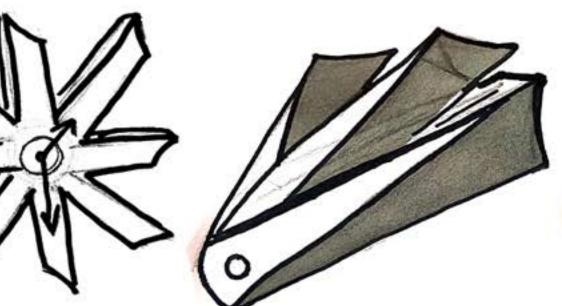
This design wouldn't have been possible

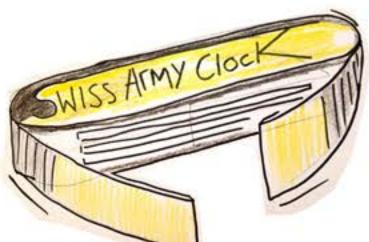
without my primary research

where i got the ideas from.

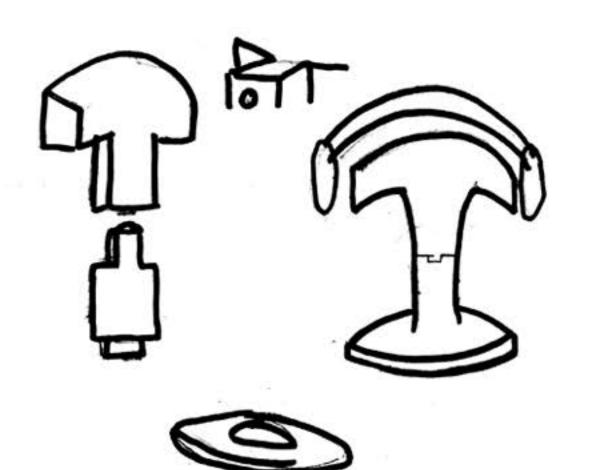
Its called a swiss army clock because it opens up like a swiss army knife, however it opens up into a clock







This is a headphone holder.



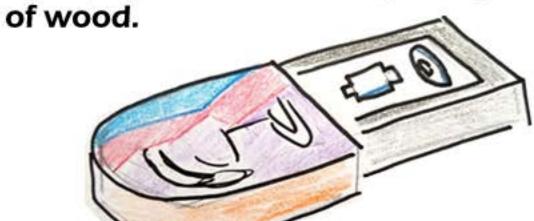
The pieces can slot in to one another easily.

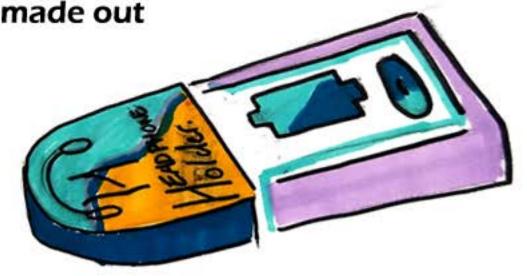
The packaging matches with the shape of the product, so material wont get wasted.

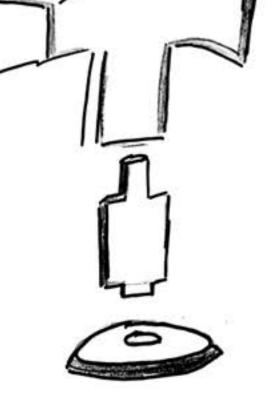
"3 pieces to connect"

It comes in 3 pieces so it fits in the packaging.

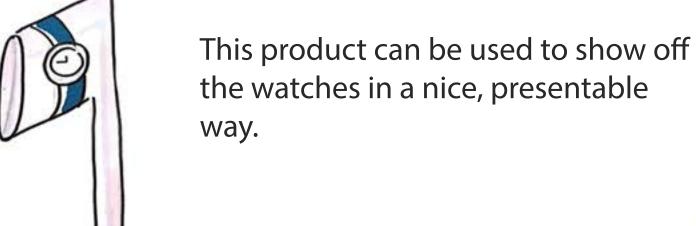
Each piece connects really easily and is made out



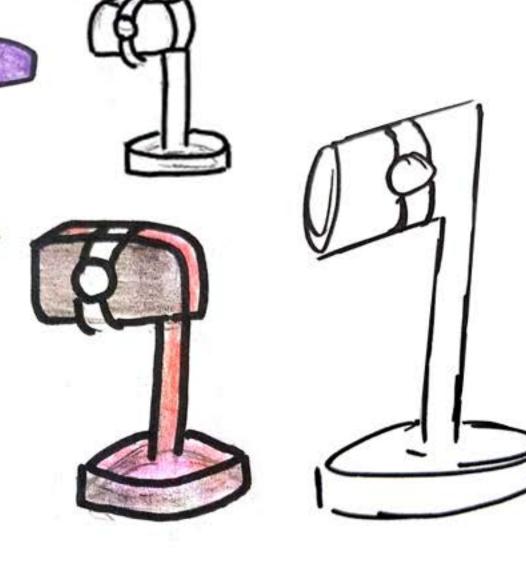




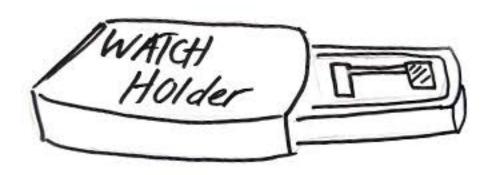
This is a jewellery/watch holder







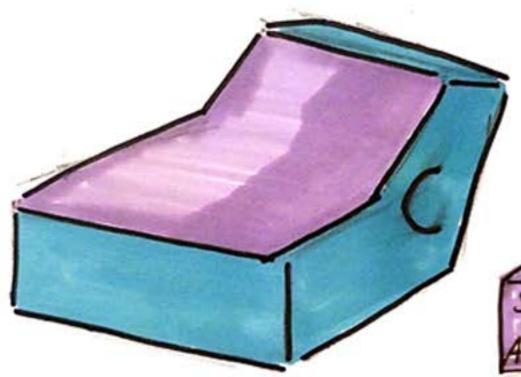
You place your rings on the bottom and your watch and other jewellery on the small wooden stand.



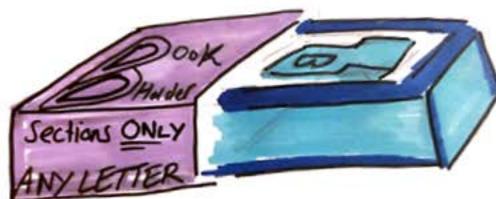
The packaging is a rectangle box as the product will fit easily inside without wasting material.

This is a book holder stand design.





"Choose any letter you want"



As this will need to fit through the post, the packaging needs to secure the product safely but also at the same time not to waste material.



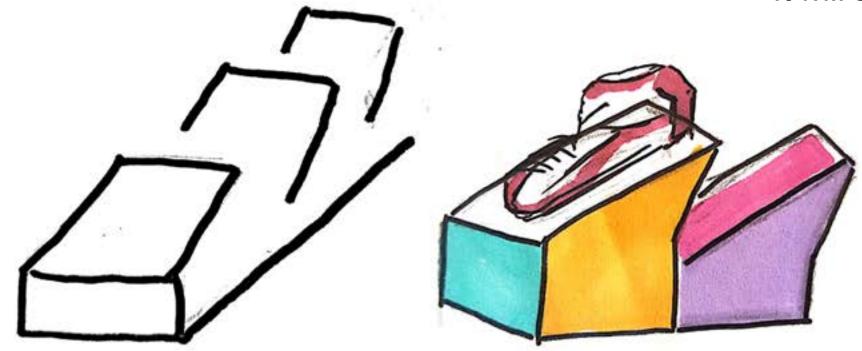


"It comes in sections"

This product will be made out of wood.

This is a shoe stand.

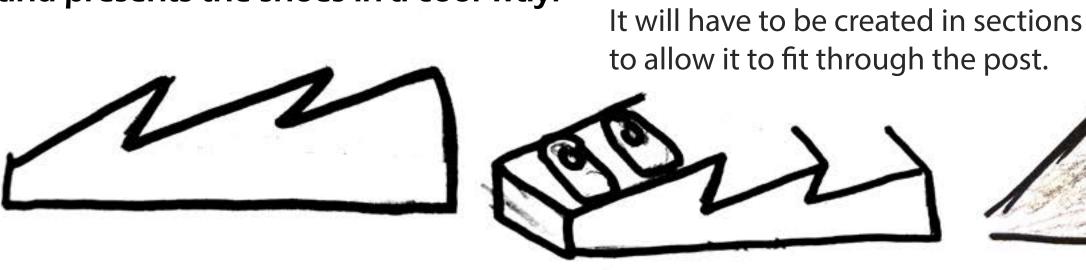
It will come in various colours.



tand comes in sections

The stand is created at an angle so when you place the shoes on the stand it gives a nice finish and presents the shoes in a cool way.

This product might be too big to fit through the post so the stands are only suitable for kids shoes as this product will have to be made smaller to fit throught the post.

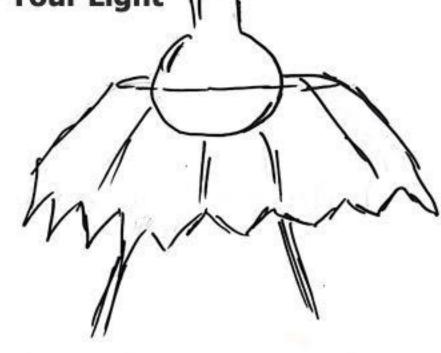












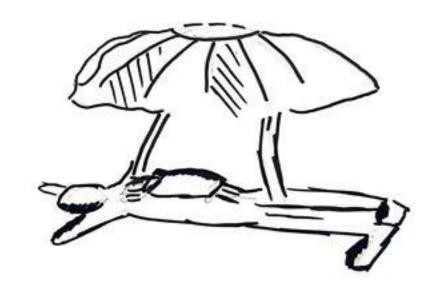
The product will come in a round tin as the parachute is round and will give a good presentation to the product when the lid is open.

The parachute covers the light bulb in a safe way without getting hot. The action model is attached with strong rope and the design gives a strong impression of a sky diver



This product is designed for kids.

The action model will be made out of plastic but the parachute will be created with a safe material which would not get hot easily as have the possibility to melt otherwise.





The Swiss Army Clock



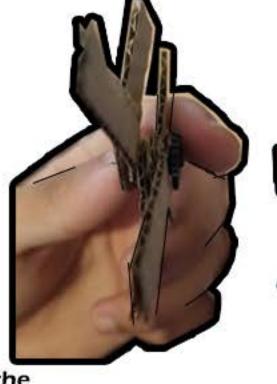
Firstly you draw out 8 equal rectangles on cardboard using a pencil.



Using scissors cut each rectangle out and angle it across.



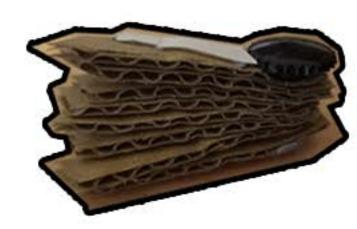
Using a pin, pin through each of the rectangles.







For the clock hands doubled sided tape was used. With scissors, cut out a big and small traingle then stick it on using the double-sided tape.



This was a successful prototype as it highlights what is both good and bad with the design. The design is good because it allows for it to be easily posted and is a unique design to the classic rolex. This is good because it means consumers and fans of the brand would be more attracted to this product because of its uniqueness. An improvement for my final would be to use another material for the clock hands as the doubled sided tape doesnt go well with the cardboard.

The Watch Holder



Firstly, cut out a small circle from styrofoam using scissors.



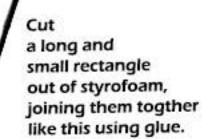
Next, cut out a strip of carboard to size and make folds using a ruler.



Making the folds made the cardboard fold easily and join together like this, using tape to join the ends togther.



Add the styrofoam circle inside creating the bottom of the watch holder.



Add a small piece of cardboard on to the small styrofoam rectangle using glue as shown above.



Add the top piece to the bottom using glue.

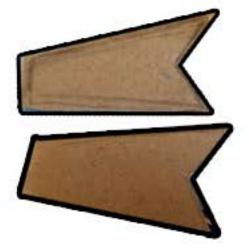
Creating this one was very fun it looks just like how i wanted it. It wasn't too difficult to make. In my opinion for the first prototype of this model it turned out good.



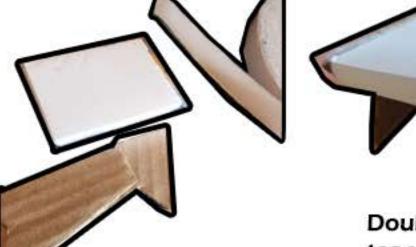
The Shoe stand



Using a piece of cardboard a template can be Us sketched out for the ar stand.



Using the first template, another template was created by sketching it out.



The top part was made from styrofoam and the shape was determined by using the templates



Doubled sided tape was used to attach it to both peices.



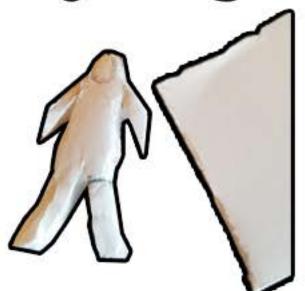
Next, paper was cut and stuck at the back piece of the templates





The model was not hard to make as it involved a small amount of materials. Regardless, it came out good as it ilustrates how the model will look like.

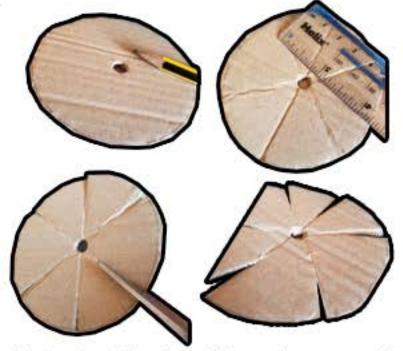
Sky Diving Action Model



Firstly, styrofoam was used to create the action model with scissors.



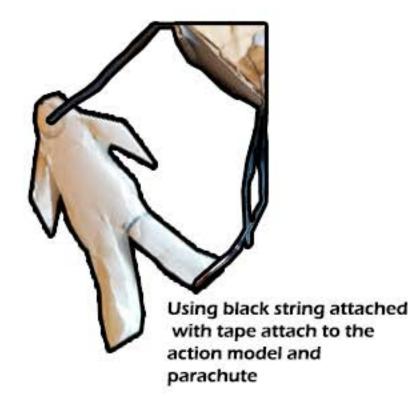
Next was the parachute, so draw out a circle on cardboard

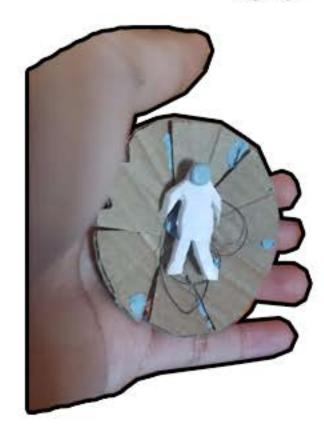


First cut out the circle. Then using a pencil to poke a hole in the centre and a ruler to fold it. Then scissors was used to cut each line slightly.



Cutting each line allowed the cardboard to create this cone shape, GLue was used to join everything together.





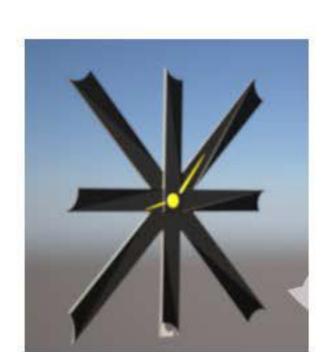


This model was the hardest to create.

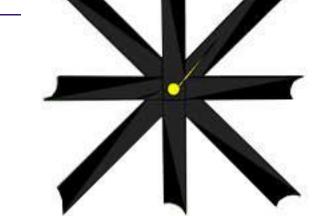
Joining the parachute to the action model was very complicated as the model would not remain still as the string was very uneasy to work with. My idea from the start has improved, the right materials were used for this product.



Google Sketchup/ Rendering Swiss Army Clock

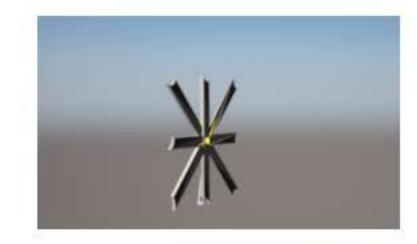


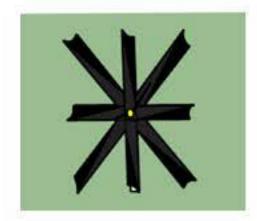


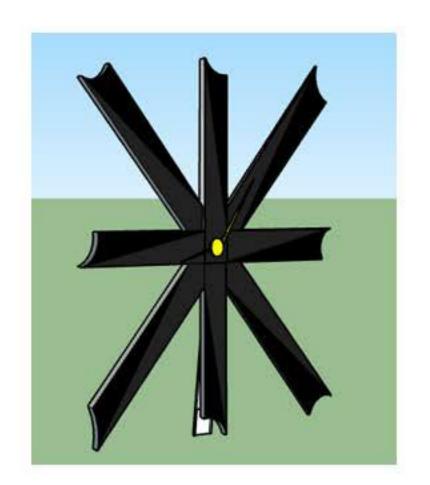


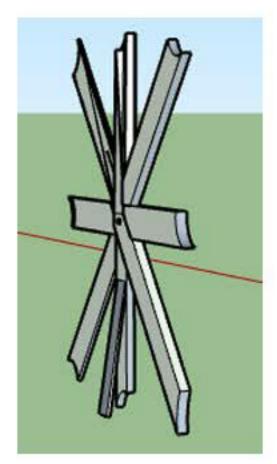
Flip the stand out to allow it to stand.

(ADJUSTABLE STAND)









This clock was quite difficult to make as the curves made on top of each section didn't match It looked exactly

how i wanted it to look towards the end. Rendering it made it a whole new model the shade of the different black gave it a slick and clean look. It does look like its created by Rolex.

When you take this product out of the box all you have to do is open the clock up like a swiss army knife and attach the clock parts using the screw provided and flip the stand behind. To stand it up.

The Swiss Army Clock comes in a variety of colours.

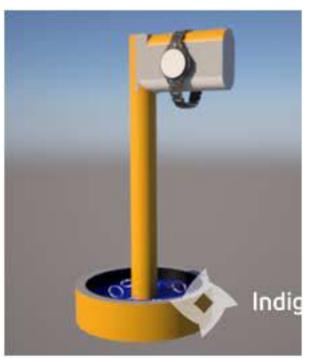
Colour Variations of The Swiss Army Clock



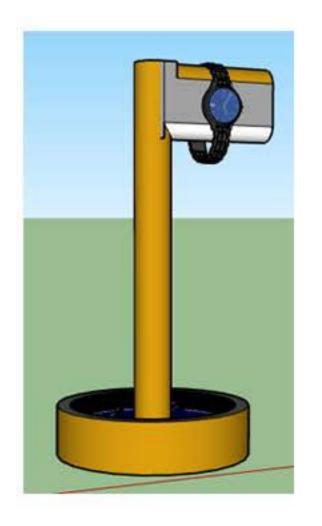
Google Sketchup/

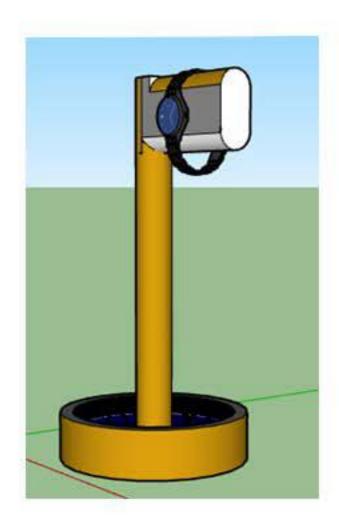
Rendering
The Watch Holder











This watch holder is a simplistic design so it was easy to create.

The colour scheme of the product helps it stand out so that the consumer would be attracted to it. As it comes in pieces it would be easy to put through the post and easy to assemble.

The pole and bottom part are seperate when its out of the package they both have grooves which allow them to connect to each other.

Once it's put together, its ready to use.

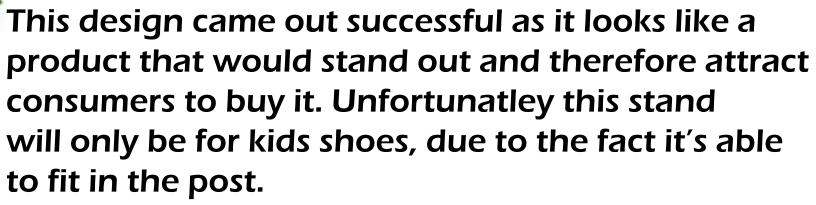
Google Sketchup/

Rendering

The Shoe stand







Indigo renderer really brought it to life and shows the shape and colours really well.



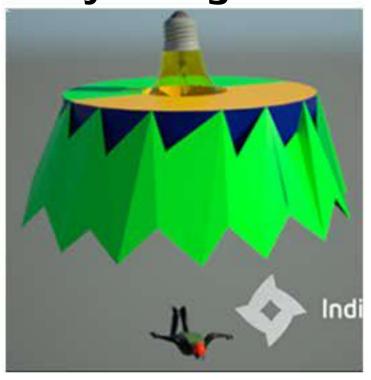


This product comes straight out of the box theres no sections to put togther.



Google Sketchup/

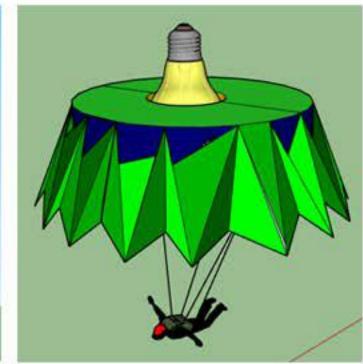
Rendering
SkyDiving Action Model











This Skydiving Action Model wasn't too difficult to make, it did make it easier to use the 3D warehouse for the action model. Creating the parachute was a new thing for me and made me learn new techniques. When it rendered it really looked like the action model was soaring through the sky.

The target audience for this product would be children, typically boys. The design and render came out successfully as it looks like a product that the audience would buy.

When it's out of the package, everything is together all you have to do is attach it on to your light. (making sure the light is off before you do it)

1:1 Scale Model

The Swiss Army Clock

The process/Clock pt 1



Firstly draw out 8 equal rectangles on cardboard using a ruler and pencil



Using the pin to create holes



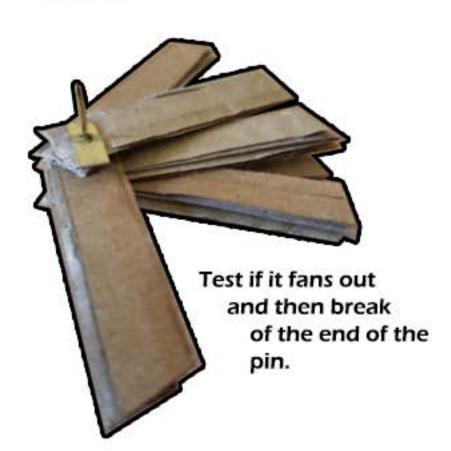
Using Scissors to cut each of them out.



Threading each one by one making sure they are in the right direction



Using scissors to cut the top of each one at an angle like this



1:1 Scale Model

The Swiss Army Clock

The process/Clock pt 2



Once the clock is fanned out. It will look like this.





Using a small piece of cardbaord cut into a circle to cover up the pin. Using glue.

By adding another rectangle of cardbaord on the bottom of the model like this using glue allowed the clock to stand and become a portable clock.



Instead of using double sided tape, using blue styrofoam shows of the hands of the clock even more.

Using glue.

Allowing it to have a stand makes it more easy to put it down and look good on a desk.

1:1 Scale Model

The Swiss Army Clock

The process/ packaging



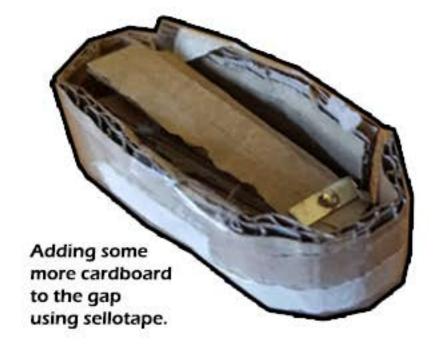
Using cardboard for the packgaing

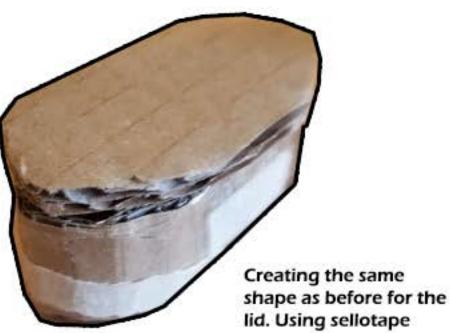


Cutting out this shape for the base



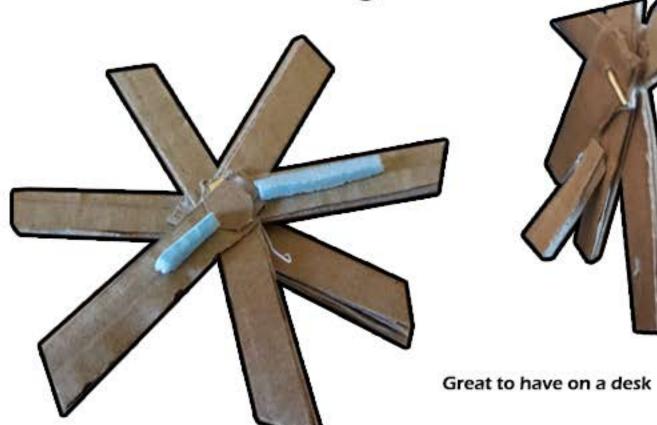


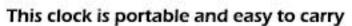




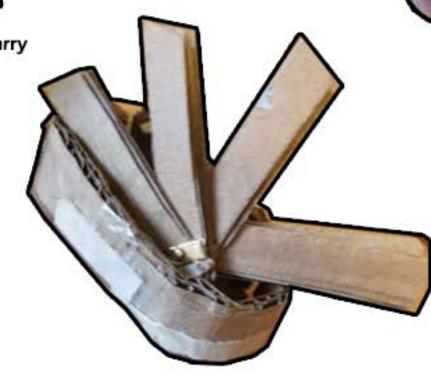
FINAL MODEL

The Swiss Army Clock











When opening the package, take out the clock and fan it out. Attach the clock hands with the screw provided. Flip the stand with its hinge to stand up the clock