EVALUATION OF SKETCHUP

1. Screen grab a couple of different views of your Sketchup model, print them out on one page of A4, and stick in your exercise book.

2. Answer the following questions on the next page:
   1. You have now used 3 different methods to design your lamp (drawing, modelling, and SketchUp), what are the advantages and disadvantages of each method? Think about; speed, ease, enjoyment, does it promote/hinder creativity?
   2. In the future you will be asked to use the iterative design process to design other products. Which of the 3 designing methods would you use? And in which order? Explain your answer in as much detail as possible.
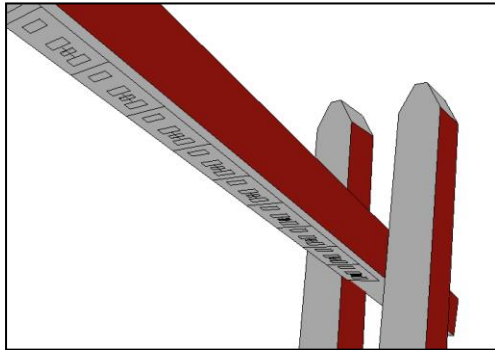
WHAT AREAS TO COVER FOR ANNOTATION

- **Form/Aesthetics-** How does it fit with your designer/ company? What shapes/ colours have been inspired by your company?
- **Function-** What is the purpose of the light? Does it do anything else?
- **Materials-** What is it going to be made from? What are the reasons for using these materials?
- **Manufacturing-** How will you make it? How will the parts be joined together? What tools will you use? Is CAD/CAM involved?
- **Developments-** What has changed from your very first ideas? Why did you make those changes?
- **Environment-** Where is it going to go?
- **Size-** Must include clear dimensions for all your parts (put this on the exploded view or the cutting plan)
- **User-** How does it appeal to the target market? Why is it a brilliant design/ lamp?
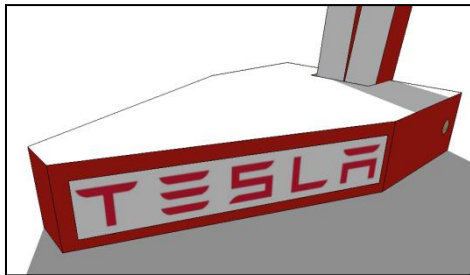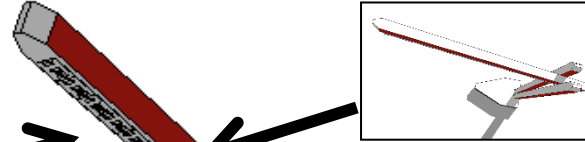
FINAL DESIGN IDEA

From the top it looks sleek and futuristic

The LED light is stuck to the underside of the top part which meant I don't have to cut much of the LED off.

Manufacturing: This part will be made using a ……… and then attached to this part by…………..

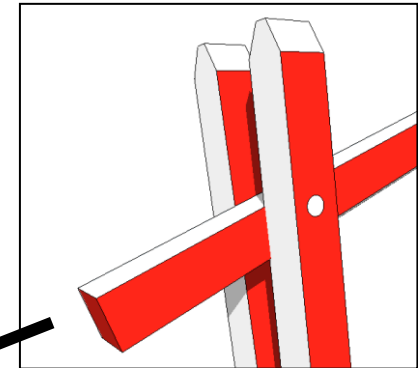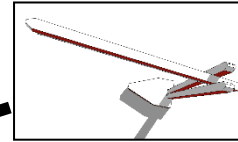**The top will move around this white pin which will be painted dowel or acrylic rod**

Form: I have picked out two simple shapes from my inspiration board which make this lamp fit into the style of tesla. I have chosen red and white colours to link to the logo colours.

Materials: I will use ……………for this part because……………

Function: The lamp works well to light a surface due to its height and its length. The top part moves thanks to the pin going through the three parts. It can be moved to light a larger area.
The base is large and weighted enough to support the rest of the lamp

Development: Here you can see the different designs I have had. I have changed…………. Because…………. I have also moved this because………… and changed the material to this so that…………

The logo can be vinyl cut and stuck to both of the sides of the base. The base is heavy enough to support the lamp

| IMAGE OF MODEL/S | IMAGE OF 1ST SKETCHUP | IMAGES OF OTHER DEVELOPMENTS |

FINAL DESIGN: EXPLODED VIEW

Must show where the light strip will go

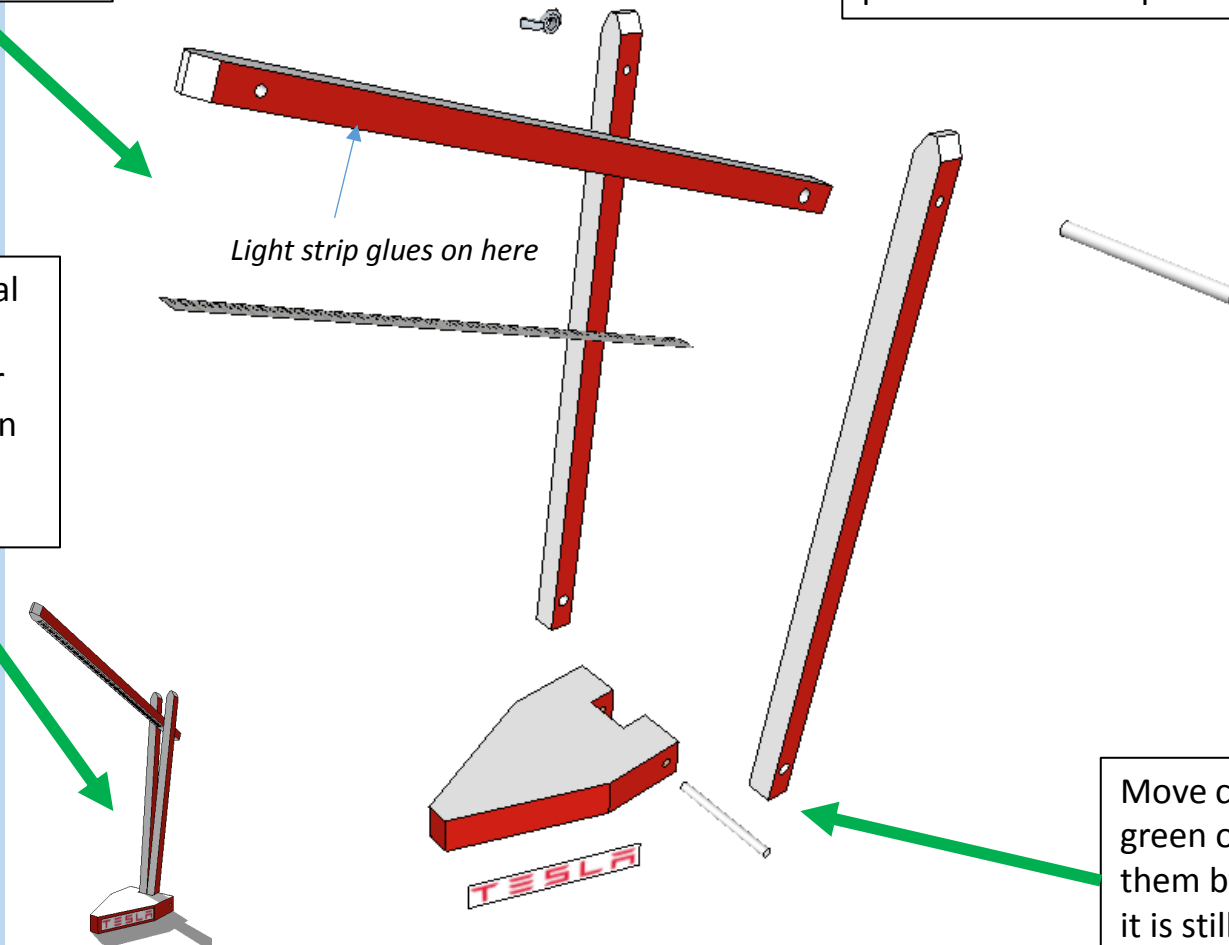Exploded view should take up an entire page of A4-portrait or landscape

Try to show screws/ bolts etc

Light strip glues on here

Keep an original view at the bottom of your page so you can see how it all goes together
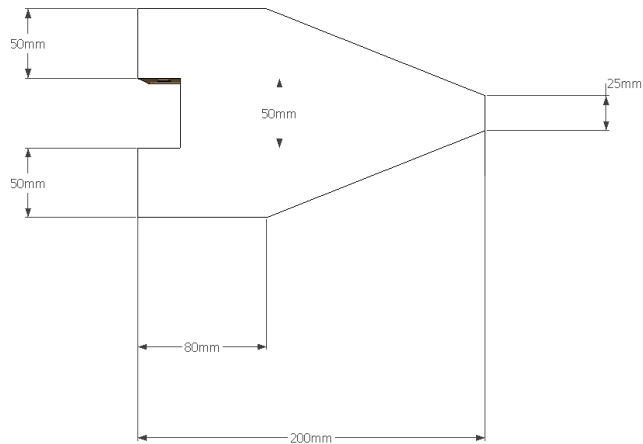
Move components along red, green or blue axis. Only move them by a small amount so that it is still clear where they go on the original model.
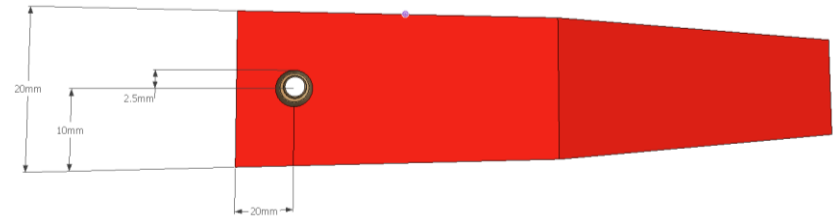
FINAL DESIGN: CUTTING PLAN

1 SHEET OF A4 PAPER

Base: top

50mm
50mm
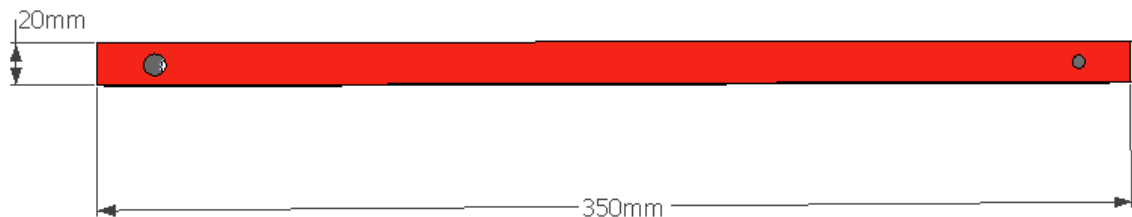50mm
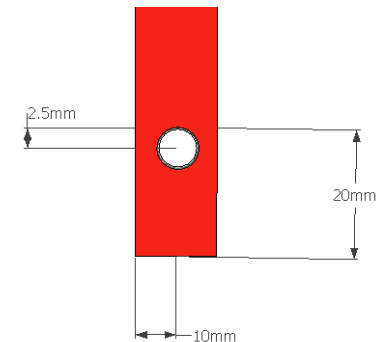25mm
80mm
200mm

Base: side & holes

20mm
2.5mm
10mm
20mm

"Holes will be drilled in the same place at all ends of the arms"

Main Arms: side

20mm
350mm

"Arms will be 20mm thick Pine. There will be 3 identical arms made"

2.5mm
20mm
10mm

LEARNING LADDER ASSESSMENT

Mark	What you need to do…
9-10	**SketchUp Skills:** You have experimented with SketchUp Plugins, which have resulted in a perfect, photorealistic model, which you would expect to see in a magazine.
	Annotation and Presentation: The final design pages are detailed enough for anyone to manufacture the light without any other information. You have a detailed cutting plan, with all dimensions recorded neatly.
6-8	**SketchUp Skills**: You have created a highly detailed and complex model which includes components from the 3D Warehouse that have been integrated into the design accurately. (eg. Light strip, screws/ hinges/ bolts, images)
	Annotation and Presentation: Your professional presentation includes a range of 3D screenshots, exploded views and dimensions which highlight all details of the design. Your annotations clearly explain all aspects of the design including developments made and how it relates to your designer.
3-5	**SketchUp Skills:** Your design shows an accurate model with clear attention to detail and a use of a wide range of SketchUp tools. The textures and materials look realistic.
	Annotation and Presentation: You have taken a range of screenshots, which highlight most details of the design. Your annotations help to explain the design further.
1-2	**SketchUp Skills:** You have created a basic model, which has some textures. There are obvious errors in the construction of the model and the proportions are not correct.
	Annotation and Presentation: You have taken screen shots of your final design which show some of the features. Your annotations are lacking information or detail.