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?
**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.

**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.

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

**Materials:** I will use ............for this part because.............

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

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.

From the top it looks sleek and futuristic.

The top will move around this white pin which will be painted dowel or acrylic rod.
**FINAL DESIGN: EXPLODED VIEW**

Must show where the light strip will go

**1 SHEET OF A4 PAPER**

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

Light strip glues on here

Try to show screws/ bolts etc

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.

1 SHEET OF A4 PAPER

Must show where the light strip will go

Try to show

screws/ bolts etc

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**

**Base: Side & Holes**

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

**Main Arms: Side**

“Arms will be 20mm thick Pine. There will be 3 identical arms made”
# LEARNING LADDER ASSESSMENT

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<tr>
<th>Mark</th>
<th><strong>What you need to do...</strong></th>
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| **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. |