COATHOOK
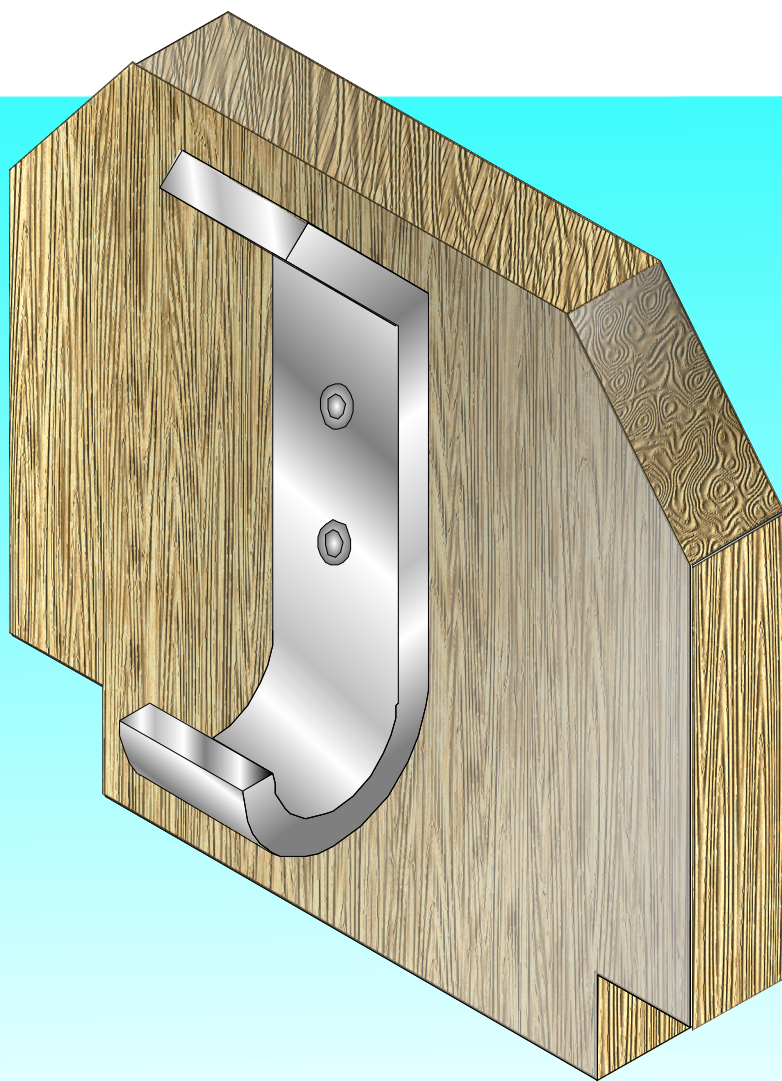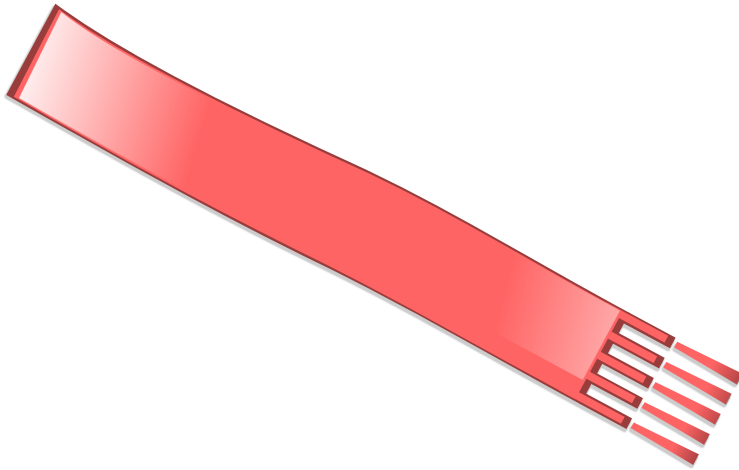
DESIGN BRIEF

You have to design and manufacture a product that will hold a bag, jacket, scarf and any other item of clothing for a room.

RESEARCH

Make a list, with the assistance of your class teacher, of the things that you may have to research before attempting to design and make this product.

1. Using ICT equipment research the variety of coat hooks that are already on the market.

   Record your findings or print of a copy of your research.

2. Find out two of the properties and uses of both materials Aluminium and Mild steel, and record them in your jotter.

   Watch the short video on metals and take notes in your group and then record the information in your jotter.

http://www.bbc.co.uk/education/clips/zpg6n39

3. Do you think Aluminium is a material that is sustainable in today's environment?

   Give reasons for your answer.

4 How do you attach your metal to the wood. Record this information in your jotter.

5. Record any questions you may wish to ask to assist with your design.

SPECIFICATIONS

Complete the specification list shown below in your jotter for function, safety, environment and finish.

FUNCTION

AESTHETICS

The metal of the coat hook must be shaped to support two items of clothing and be of a form that can be easily worked to shape. Both metal and wood must be attractive. The support for the backing will be attractive and will fit well with the environment.

ERGONOMICS

The coat hook has to be positioned on the wall or on a cupboard door so that people of young people and adults will be able to reach it comfortably.

SAFETY

ENVIRONMENT

MATERIAL

The hook will be constructed from MILD STEEL or ALUMINIUM and the backing constructed from a MAN MADE material.

FINISH

DESIGN IDEAS

1. Copy or trace out the picture of the coat hook shown below.

2. Shade and render the coat hook to look like aluminium

3. Use the idea generation technique called "TAKING THE PENCIL FOR A WALK" to generate possible design ideas for the backing for the coat hook as shown by your class teacher.

4. Develop and annotate your ideas.

5. Make a cardboard or paper model of your design idea.

6. On your model indicate how it will be finished the colours and patterns you may wish to put on your design.

7. Note in your jotter all tools and equipment you would use to make your model.
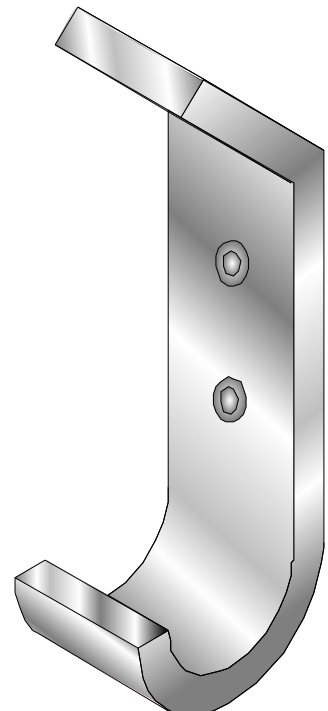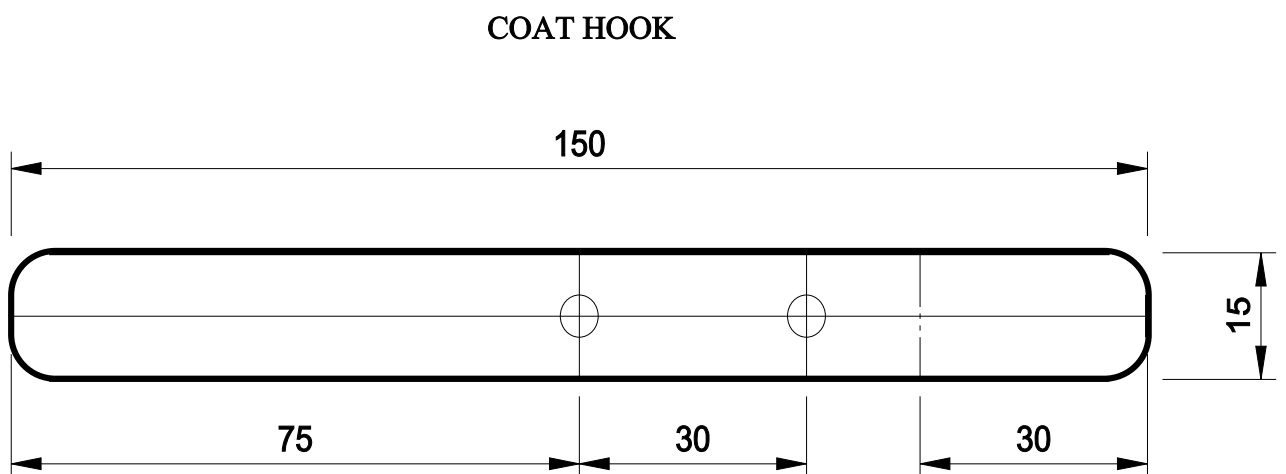
SOLUTION

Copy out the solution drawing of the coat hook shown below using a ruler.

Draw out the solution of your backing for the coat hook as an orthographic view showing the main dimensions of you product taken from the cutting list.

Copy out the cutting list into your jotter.

COAT HOOK

150

15

75

30

30

Draw out the the final solution of your backing in a square 150mm x 150mm. Make sure your design fits inside this shape.
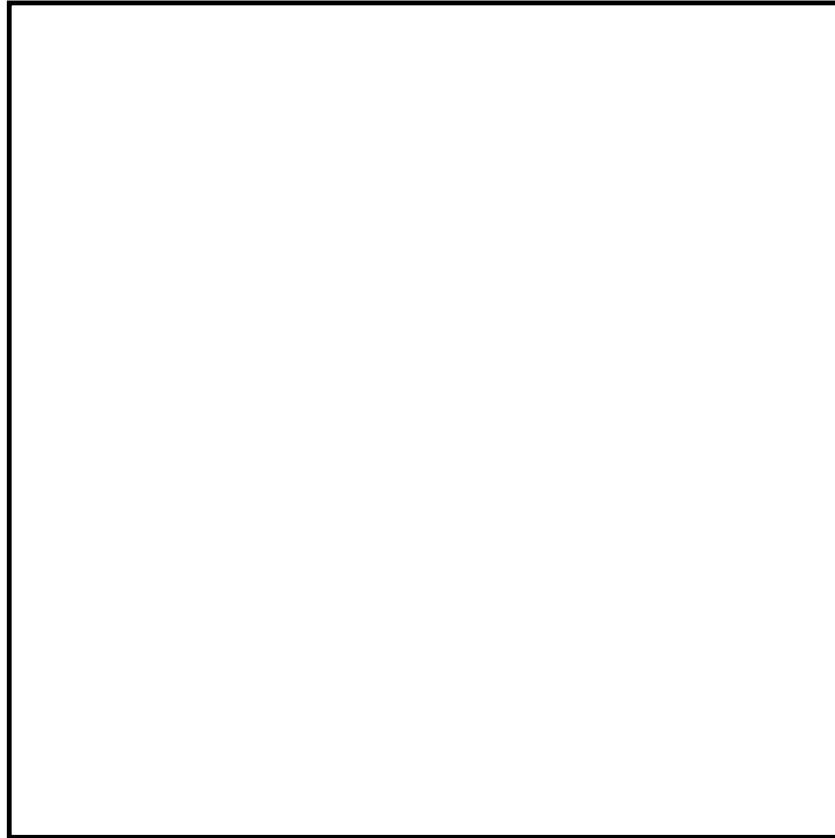
CUTTING LIST

PART	LENGTH	BREADTH	THICKNESS	MATERIAL	No OFF
HOOK	150	15	3	MS / AI	1
BACKING	150	150	18	MDF	1

EVALUATION

What makes a design successful?   How do you judge a design?

There are a wide range of methods and strategies for analysing and evaluating designs. There is a number of methods to help evaluate a product and here is an easy acronym to remember.

F.A.M.E. value

Function - What does it do and how does it work?

Aesthetics - Is it attractive, why and what makes it so?

Material - Was the material a good material to work with??

Economics - How much does it cost and is this good value for money?

Finish   Is my product well finished?

Design a series of questions that you could ask your peers to help you answer the above design factors.

Write up an evaluation based on your findings and add any other comments that you personally have about your product.

Note and draw out at least one change you would make to your product.

EVALUATION

Are the sizes of your model accurate compared to your solution drawing?	1	2	3	4	5

1 Extremely accurate 2 Very accurate 3 Sizes are out by 5mm
4 not very accurate   5 completely the wrong size

Grade and evaluate your product by writing a few sentences looking at the following design factors: -

Aesthetics	1	2	3	4	5

Function	1	2	3	4	5

Material	1	2	3	4	5

Finish	1	2	3	4	5