

# ALESSI CLOCK DESIGN AND MANUFACTURE

#### **DESIGN outcome 1-2**

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D2.3, D2.4

### **MATERIALS & MANUFCATURING outcomes 1-4**

Using correct names and terminology when referring to materials and their properties MM 1.5

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MM2.4

In assessing the candidate's capability in Outcome 3, centres should look to the standard of work produced and look for evidence which demonstrates that the prototype Alessi clock is functionally sound and generally free from faults. Cutting, shaping and finishing techniques for metal should be appropriate and should demonstrate precision in the work.

#### MM3.2, MM3.3, MM3.4, MM3.5

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In this assessment task, you will design and manufacture a Alessi Clock. You will need to produce sketches or other representations of your different ideas and use your knowledge of materials to make decisions about manufacturing.

In this ta	sk you will undertake the following activities	DESIGN	MATERIALS & MANUFACTURE
Activity 1	Produce a series of initial ideas	D 1.5 1.6	
Activity 2	Produce drawings in detail for your final design	D2.1, 2.2	
Activity 3	Make some models to help explain and investigate your designs.	D2.1, 2.2	15
Activity 4	Produce and plan for manufacture and then make your product	D2.3, 2.4	16
Activity 5	Manufacture you Alessi clock prototype.		MM1.5 2.4, 3.2,3.3,3.4, 3.5
Activity 6	Write a final product evaluation for your Alessi clock.		MM4.1 MM4.2

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### **SITUATION**

Alessi, one of the most important "Factories of Italian Design", is based in Crusinallo, Italy. Founded in the 20s, in a region historically devoted to the household goods production, since the 50s Alessi specializes itself in stainless steel manufacturing. During the last decades we have also worked with several other materials such as porcelain, glass, wood and plastics. Objects made with these new materials are today produced at different production locations around the world, yet being wholly original Alessi objects: conceived with the same excellence in design, produced with the same care for quality and characterized by that particular mix of eccentricity and style and culture, irony and elegance that make all of our products unique.

### BRIEF

I will design and make a Alessi Clock. The product will be eye catching and appeal to all ages. The product will be made mainly from wood. Also, the product will be able to hold stand, be able to tell the time and made of different shapes and sizes.

Use some of the following pointers as inspiration.

Coral Nature Cheenful Regular shapes

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# **SPECIFICATIONS**

### **Function/Performance**

- Must able to tell the time
- Must have Alessi shapes
- It must be able to stand
- It must be a reasonable size to see the clock face.

### **Materials**

- Must be made mostly from wood.
- Must be made of at least two parts joined together
- Must be recyclable.
- Must be inexpensive.
- It must be durable against wear & tear.

### **Aesthetics**

- Must be attractive and eye catching.
- Materials to be used must add quality and decoration in the style of Alessi

# Production Processes/Manufacturing

- Must be made accurately and be well finished.
- Must be made using the
- correct wood working techniques
- It must be free standing

### Safety

- Must be robust (should not fall apart or have small parts).
- Must be stable when assembled

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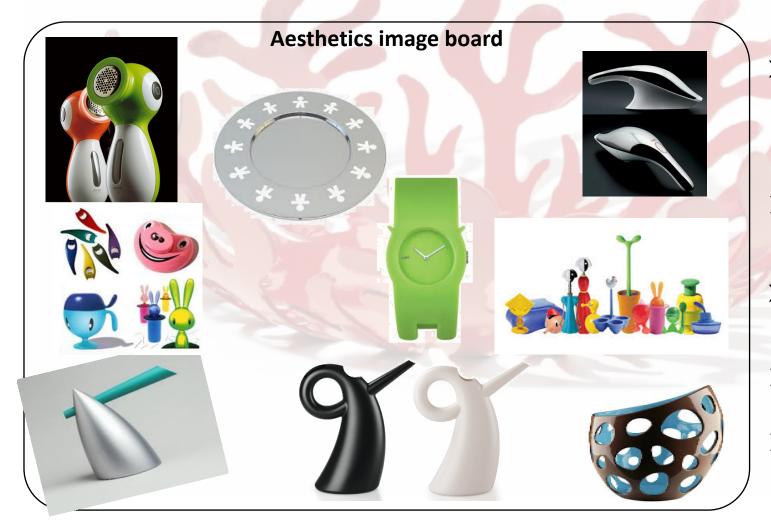
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Things to investigate include aesthetics manufacture processes, materials and Clock fixings.



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# **ACTIVITY I** initial ideas

- Produce a range of ideas for the Alessi Clock . You must consider what components will be required.
- Show on the last initial ideas sheet your final idea.

http://www.emilhjorthrohde.dk/projects/alessi



The Alessi clock must be made of no less than two parts and include some form of jointing used in woodwork.

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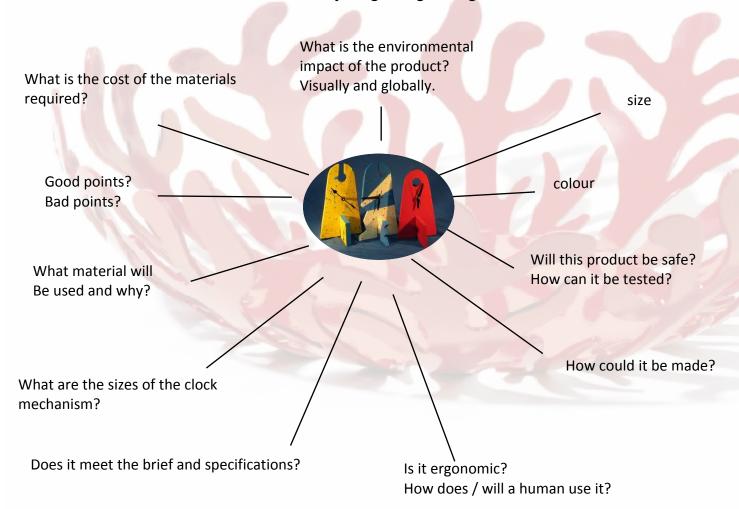
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# **Ideas & Annotations**

Your design drawings do not always give the reader all of the details you have thought about. Annotations are an excellent way of getting thoughts across.



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# **ACTIVITY 2** detail drawings

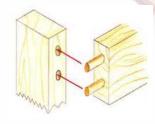
Illustrate your sketches to show details, including how the clock will be assembled.

Think about the information that has to be communicated and the best way to show it.



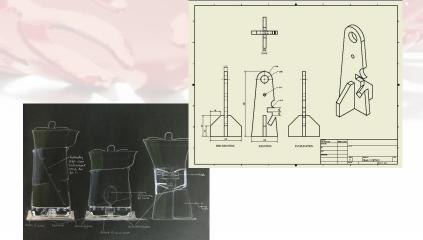
*Important* 

This task will require you to communicate information on the materials that you are using. For example, sizes, properties, cost, manufacturing colours and anything else you think is relevant.



Possible wood joints





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### **ACTIVITY 3** Model & Evaluation

Create a model to support your design thinking and decisions.

Think about what materials are best suited to manufacture the model so that it will closely resemble your design.

Write an evaluation of the model to say how well the model works.



# Important

In this activity, make your model full size. Remember you are trying to evaluate your design by modelling a physical representation of it.







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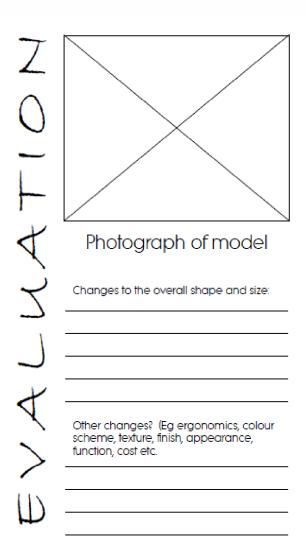
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### **ACTIVITY 3** Model & Evaluation



Changes to the materials to be used:  What I consider to be the good points:  Views of other people regarding my design		aking and testing the model, I have decided that there a need for alterations . Changes to the original design.
	Change	es to the materials to be used:
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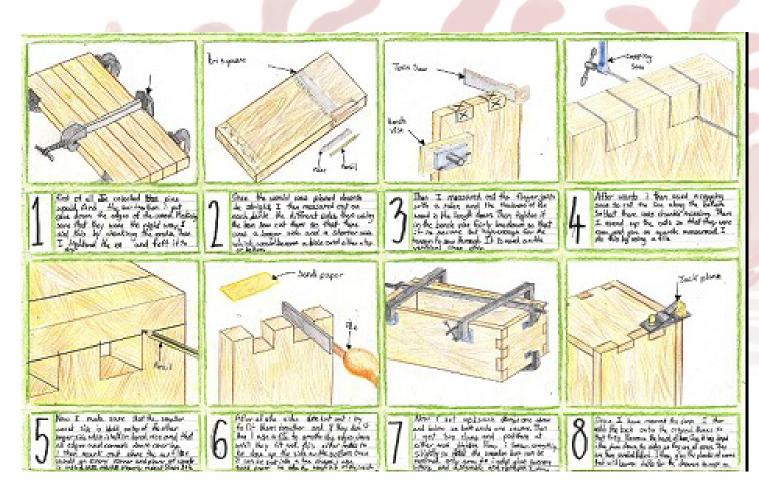
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# **ACTIVITY 4 Manufacture & Plan**

Using what you have learnt and thought about while making your model, produce a planning for manufacture sheet for the making of your clock.

### **Example shown below**



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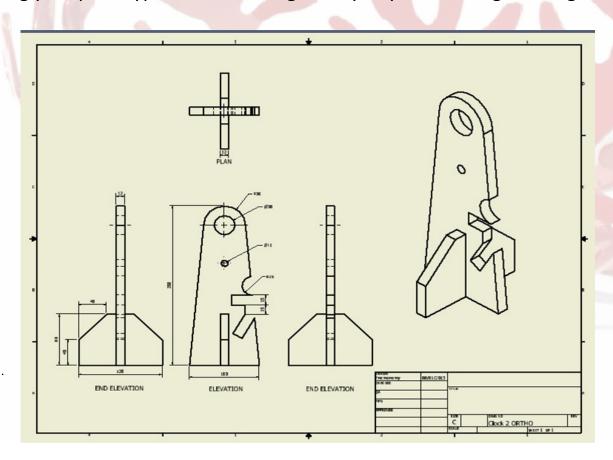
### **ACTIVITY 5 Manufacture**

### Manufacture your Alessi clock prototype by:

Choosing the best wood in terms of aesthetics, workability, practicability, function and performance.

Using the correct tools for each task.

Making your prototype while referring closely to your working drawing.



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MM3.2, MM3.3, MM3.4, MM3.5

The evaluation will have related to the prototype Alessi clock and the manufacturing processes surrounding it. Suggestions for improvements should be based on evidence and include practicalities and efficiencies in planning, and in terms of the prototype, craftsmanship and finish. Suggestions will be made independently and will be based on the evaluation.



### **ACTIVITY 6 Evaluation**

**Evaluate your pen holder prototype by:** 

Evaluating your planning for manufacture. Outline suggestions for improvement in terms of practicalities and efficiency.

Evaluating your clock prototype in terms of the build quality and finish by making suggestions for improvement.

- What are your initial thoughts of the final design? What changes would you make next time?
- Are you happy with the materials you chose? Would you use different materials?
- Is the colour scheme exactly what you expected? What alterations would you make?
- Did the project take too long to make? Would this alter the cost of manufacture?
- Is your solution safe? Could it be made safer?
- Are the building processes you used to make your solution okay or would you make it differently next time?
- Is the solution the right size/shape?
- What are the views of your peers regarding your design?
- Does it work? What changes are required?
- Does it fulfil the SPECIFICATIONS

### **DESIGN outcome 1-2**

In designing the Alessi Clock, idea generation techniques will have been used and there will be evidence that these have clearly informed the final prototype proposal.

D1 5 D1 6

There will be evidence of use of graphic and modelling techniques demonstrating both 2D and/or 3D work in communicating the candidate's ideas. Both computer-generated and manual work, including physical models, are acceptable — but they must be appropriate and fit for purpose. The candidate will have planned the construction of the model with little or no guidance— whether physical and/or computer modelling. Modelling and graphics will support the justification of the final proposal for the ALESSI CLOCK

D2.1, D2.2

The final concept will be presented in a way which communicates the idea clearly — with appropriate detailing to suggest manufacturing methods for metal. The candidate will have provided a detailed plan for manufacturing including processes, materials, tools etc. This could be in storyboard format, a written plan, or other suitable method.

D2.3, D2.4

#### **MATERIALS & MANUFCATURING outcomes 1-4**

Using correct names and terminology when referring to materials and their properties MM 1.5

The candidate will have demonstrated the correct selection and use of tools for specific task. This information will be related to the content of a working drawing. Candidates will be expected to demonstrate that they can interpret a working drawing and make independent decisions based upon the information contained within it, for example which tools are appropriate, and a reasoned sequence for undertaking the task. Drawing will have a degree of complexity, eg a range of inter-dependent views.

MM2.4

In assessing the candidate's capability in Outcome 3, centres should look to the standard of work produced and look for evidence which demonstrates that the prototype Alessi clock is functionally sound and generally free from faults.

Cutting, shaping and finishing techniques for metal should be appropriate and should demonstrate precision in the work.

MM3.2. MM3.3. MM3.4. MM3.5

The evaluation will have related to the prototype Alessi clock and the manufacturing processes surrounding it. Suggestions for improvements should be based on evidence and include practicalities and efficiencies in planning, and in terms of the prototype, craftsmanship and finish. Suggestions will be made independently and will be based on the evaluation.