

Name:	
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Learning Objectives:

1. Develop an understanding of the different design movements that will be used across the A level
2. Be able to correctly identify the distinct styles of all four design movements and be able to write effectively on a chosen designer's work, life and influences.
3. Undertake a short self-study that incorporates the theory that is taught at A Level

Learning Outcomes:

1. Produce work based on the work of the four design movements which will influence the A level across NEA and Paper 2
2. Correctly apply information that has been gathered on the four key movements
3. Work independently on the exam practice work set out to prepare you for next year

Summer Project Checklist

Task	Arts & Crafts	Art Deco	Bauhaus	Memphis
Introduction				
Key Designer				
Study of Work				

Theory Element	Product Life Cycle	Life Cycle Analysis	Volume of Shapes

Task 1 - Research

Designers are influential in the evolving world around us. They look to the past, present and future for inspiration and design objects which reflect this.

Part of the A level this year is to look to at significant developments in Art & Design to inspire us.

Task

You are to research the four design movements **Art & Crafts**, **Art Deco**, **Memphis**, **Bauhaus** to develop your knowledge on the following:

- The principles of the design movement (What did they stand for?).
- Their influences.
- Some examples as pictures (no more than 3).
- The key designers who were involved in the design movement.



Key Designers

Now that you have an understanding about the design movements that will be used for our project, you are now needed to evidence a key designer/maker that you feel drawn to. This can be for any/many reasons, but it is essential that you familiarise yourself with their work.

Task

Using the first task, you are now required to produce a small fact file on 1 designer from each of the **design movements**. You need to produce a short piece of writing based on *your own opinion* of the designer. Consider:

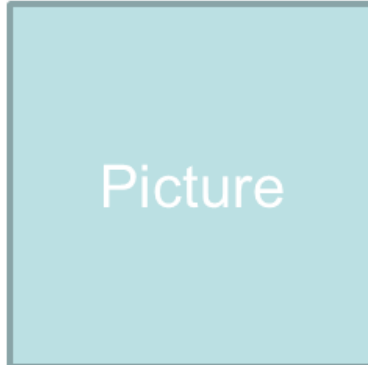
- How influential they were during the design movement.
- Do you personally like their work? Give your reasons as to why.
- How they have affected Product Design with their work?
- Some examples as pictures (no more than 3).
- Any other information you find relevant about the designer.



Key Designers

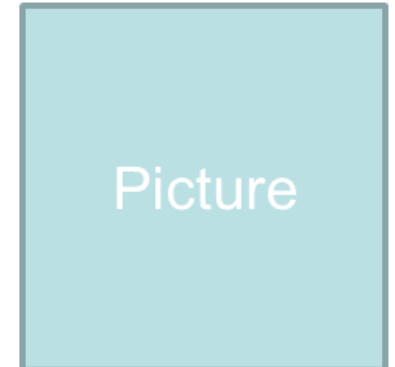
Arts & Crafts

Name	
Age	
Born	
Died	
Lived	



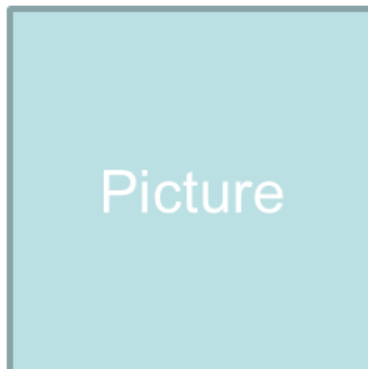
Art Deco

Name	
Age	
Born	
Died	
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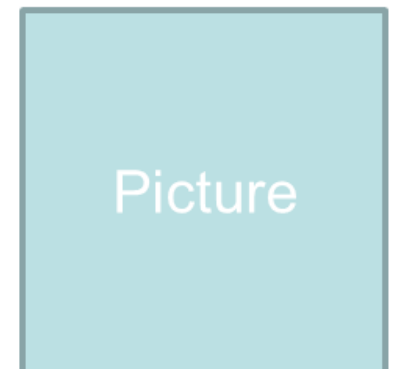
Bauhaus

Name	
Age	
Born	
Died	
Lived	



Memphis

Name	
Age	
Born	
Died	
Lived	



Study of Work

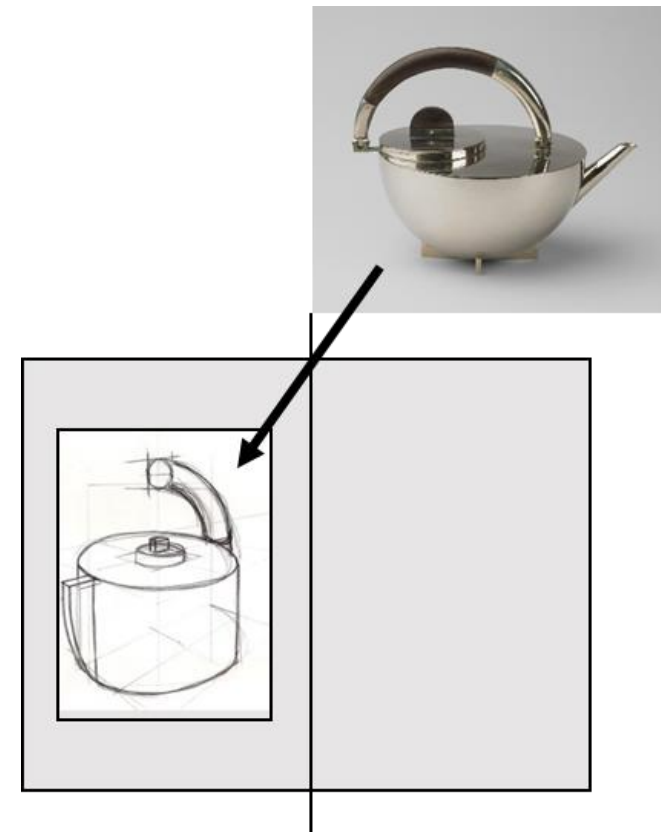
Now you have an understanding of the designers themselves, their work and inspiration you now need to produce your own study of their work.

Task

Produce a freehand sketch of a piece of work produce by the four designers.

To produce these drawings they will need to be:

- Done in pencil (2H if you have it!)
- Detailed shading (not colouring in with pencil)
- Labels indicating what the inspiration was for your designers chosen product.
- NO COLOURING.



Arts & Crafts



Art Deco



Bauhaus



Memphis

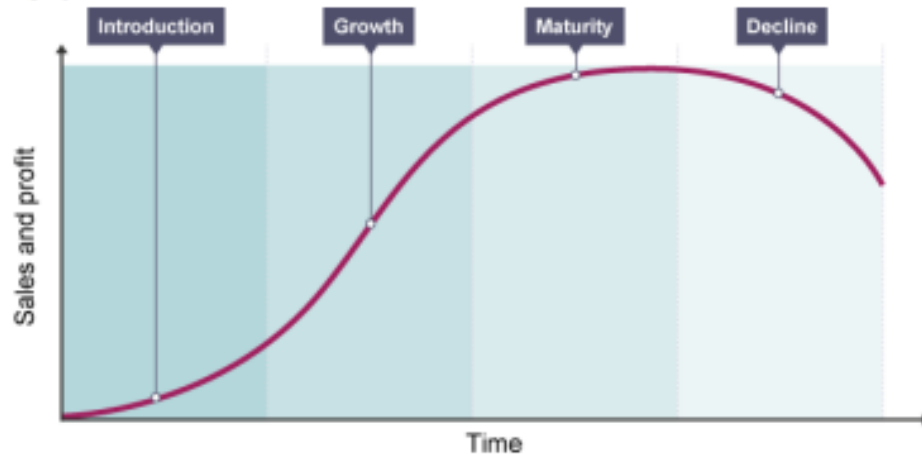


Theory - Check Yourself Before You Wreck Yourself

Here's 3 extracts of theory that are a big part of the overall A level. Study these 3 content areas and give them exam questions a go on the next page!
No final judgement - this is just getting your brain in gear!

Product life cycle

The diagram below shows a product life cycle, highlighting the four different stages a product goes through in its life. Companies can use this cycle as part of their planning of products. Keeping a record of sales over time ensures money, materials and energy are not wasted when the product has stopped selling, lessening the potential impact on the environment.



- introduction - this can be the most expensive stage for a company due to paying for a new product to be advertised and launched while sales are low
- growth - if promotion of the product is successful then sales will increase as it becomes popular with consumers
- maturity - a competitive time for the company as their product has reached out to all customers and is becoming well known, but there is continued competition as newer products are being released, and the company will need to keep sales of their product high through more marketing
- decline - product sales decrease as new competitive products come to market and/or everyone who needs it has already purchased the product

Life cycle analysis

Life Cycle Analysis (LCA) assesses the environmental impact associated with a product, including:

- raw materials
- manufacture
- transportation
- Disposal

This makes it easier for the manufacturer to identify the areas that can be altered to reduce the possible environmental impact and cost of a product.

There are two different cycles:

- linear - ends with disposal, adding waste to landfill
- circular - continuous and incorporates recycling to ensure materials and products are used over and over again



Life cycle analysis needs to be considered by the designer, the manufacturer and the consumer to reduce negative impact on the environment.

Calculating Volume – Cylinders

Cylinders have circles at each end. The curved surface is actually rectangular – imagine a rectangle wrapped around the cylinder (see Figure 3.32).

The dimensions, height and width, of the rectangle can be given as:

height = height of the cylinder =

width = perimeter, or circumference, of the circle = $2\pi r$

By applying the area of a rectangle formula ($h \times w$) the area of the curved surface of the cylinder is:

surface area of the curved surface of a cylinder =
 circumference of base x height = $2\pi r h$ or $\pi d h$

Where d is the diameter of the circle.

A cylinder also comprises a circle at each end, so:

surface area of a cylinder = $2\pi r h + 2\pi r^2$

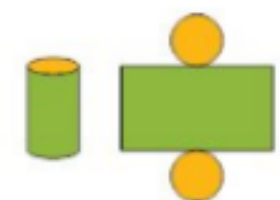
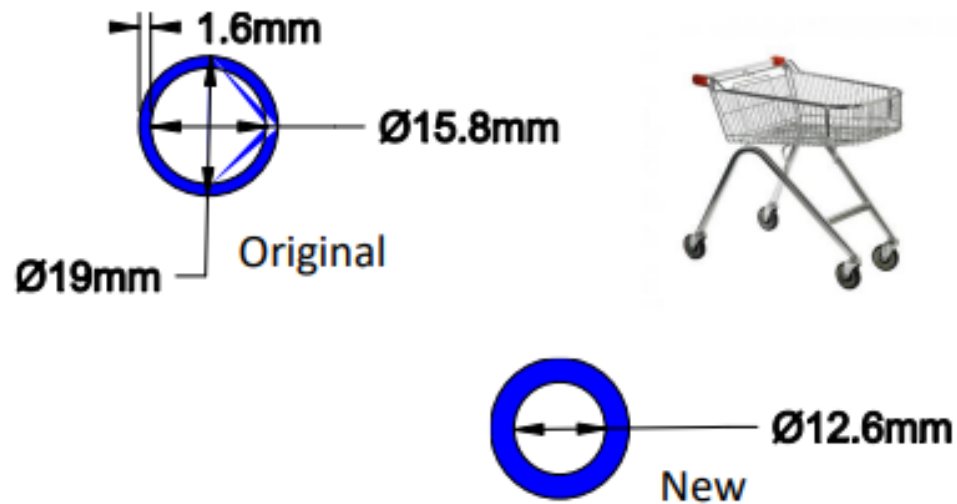


Figure 3.32 A cylinder and development

Theory - Can You Apply That Now?

1

A length of mild steel tubing of 19mm diameter is used as a handle on a shopping trolley. Product testing has revealed that the tube bends when the trolley is used at its maximum rated loading. The tube has a wall thickness of 1.6mm. In order to increase rigidity, the manufacturer is considering changing the tube to one with a 3.2mm wall thickness. The tube is 800mm long.



Calculate the increase in volume of the tube if this change is made.
Show all workings out

Ans

2

Describe the use of product life cycle graphs by product designers, on behalf of retailers and manufacturers when planning and developing new products.

3

Explain the term Life Cycle Analysis using a hardwood chair to demonstrate your answer..



Manufactured from hardwood