

# DR

## DESIGNER

### Examination Questions



# DESIGNER - CHECKLIST

Your teacher will identify the designers you are to study for your examination.

Each worksheet is composed of examination questions and has at least one link to information / possible answers.

<b>DESIGNER</b>	
PHILIPPE STARCK	
CHARLOTTE PERRIAND	
ZAHA HADID	
JOCK KINNEIR AND MARGARET CALVERT	
LUDWIG MIES VAN DER ROHE	
MICHAEL THONET	
EILEEN GRAY	
BETHAN GRAY	
MARCEL BREUER	
ROBIN DAY	
OWEN MACLAREN	
CHARLES RENNIE MACKINTOSH	
HARRY BECK	
ETTORE SOTTASS	

# PHILIPPE STARCK - EXAMINATION QUESTIONS

LINK FOR HELP [http://www.technologystudent.com/despro\\_fish/phillipe1.html](http://www.technologystudent.com/despro_fish/phillipe1.html)

1. Briefly explain / describe Philippe Starck' s background as a designer. **5 marks**

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2. List five products designed by Philippe Starck. Include dates. **5 marks**

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3. Select one of the products from question two and explain why it is regarded as an iconic design. **5 marks**

PRODUCT NAME:

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# CHARLOTTE PERRIAND - EXAMINATION QUESTIONS

LINK FOR HELP [www.technologystudent.com/despro\\_flesh/charlotte1.html](http://www.technologystudent.com/despro_flesh/charlotte1.html)

1. Write a paragraph outlining the background of Charlotte, before she became a 'recognised' designer. **4 marks**

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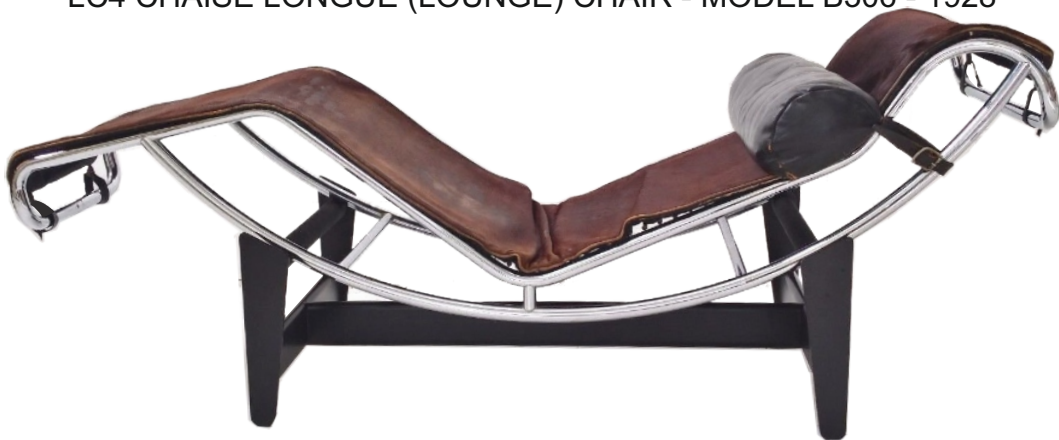
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2. Charlotte often worked collaboratively with two other designers, in the late 1920s and early 1930s. Who were they? **2 marks**

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3. Study the Chaise Longue (Lounge) Chair below. It was designed by Charlotte Perriand, Pierre Jeanneret and Le Corbusier. In your opinion, what are the outstanding features of this iconic chair? **6 marks**

LC4 CHAISE LONGUE (LOUNGE) CHAIR - MODEL B306 - 1928



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# MARGARET CALVERT AND JOCK KINNEIR - EXAMINATION QUESTIONS

LINK FOR HELP [www.technologystudent.com/despro\\_flsh/calvert1.html](http://www.technologystudent.com/despro_flsh/calvert1.html)

1. Why was it necessary to design a standard signage system for the UK motorway and road network? **4 marks**

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2. On the motorway sign seen below, identify features introduced by Calvert and Kinneir. **5 marks**



3. The road sign shown opposite, is from the 1950s, before the new Calvert and Kinneir signage was introduced.

On the back of this sheet or on a new sheet of paper, redesign the sign, in the style of Calvert and Kinneir.

3a. Produce a rough version, with notes explaining the design. **(Sketch 2 marks - notes 2 marks)**

3b. Produce a final colour rendered version. **(2 marks accuracy of drawing - 2 marks for colour scheme)**



# LUDWIG MIES VAN DER ROHE 1886 – 1969

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<https://www.facebook.com/groups/254963448192823/>

[www.technologystudent.com](http://www.technologystudent.com) © 2017 V.Ryan © 2017



THE GERMAN ARCHITECT LUDWIG MIES VAN DER ROHE, DESIGNED THE PAVILION (EXHIBITION STAND) FOR THE 1929 BARCELONA WORLD FAIR. THE PAVILION WAS TO HOUSE MANUFACTURED GERMAN PRODUCTS, TO PROMOTE GERMAN DESIGN, ENGINEERING AND TECHNOLOGY, IN THE SAME WAY TRADE FAIRS DO TODAY. HIS 'BARCELONA CHAIR' (ALSO CALLED THE PAVILION CHAIR) WAS DESIGNED BETWEEN 1928 AND 1929. IT WAS ONE OF THE GERMAN EXHIBITS AT THE BARCELONA WORLD FAIR. IT QUICKLY BECAME KNOWN AS A CLASSIC MODERNIST DESIGN. HE BECAME DIRECTOR OF ARCHITECTURE AT THE BAUHAUS IN 1930.

CANTILEVER CHAIR MR20, 1927



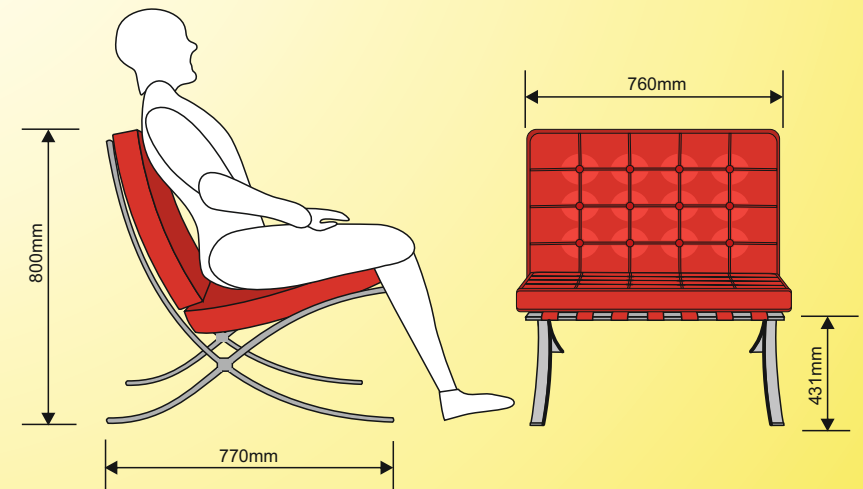
LOUNGE CHAIR 1932



BARCELONA CHAIR 1929



BARCELONA DAYBED, 1930



# LUDWIG MIES VAN DER ROHE 1886 – 1969 - THE BARCELONA CHAIR

V.Ryan © 2011 World Association of Technology Teachers

LINK FOR HELP <http://www.technologystudent.com/prddes1/barcelona1.html>

1. In what year was the Barcelona Chair first manufactured? **1 mark**

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2. It first appeared at an important international industrial event. What was the name of the event?  
**1 mark**

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3. Name two materials used in the manufacture of the chair. Name a part / component for each material.  
**4 marks**

MATERIAL: \_\_\_\_\_ PART: \_\_\_\_\_

\_\_\_\_\_

MATERIAL: \_\_\_\_\_ PART: \_\_\_\_\_

\_\_\_\_\_

4. What type of quality finish is applied to the chair? **1 mark**

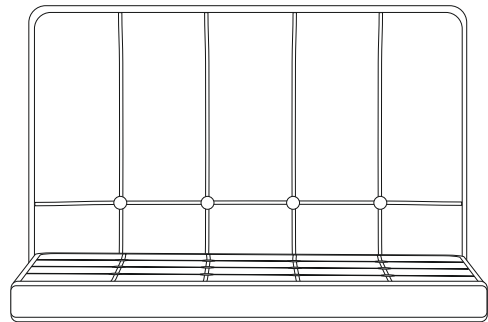
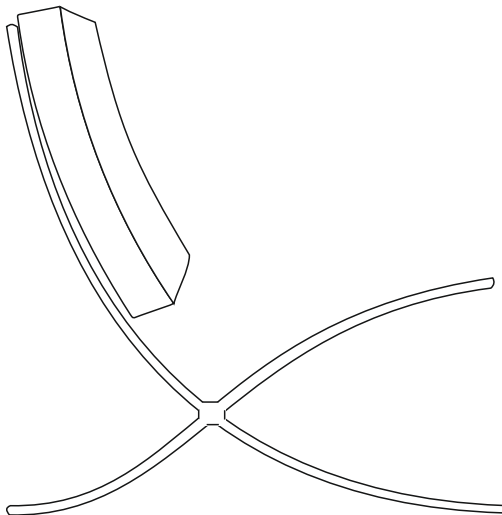
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5. Why can the Barcelona Chair be regarded as a classic design? **3 marks**

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6. Complete the front and side elevations of the Barcelona Chair, by adding the missing parts. **3 marks**





# MICHAEL THONET AND THE No 14 CHAIR

FOR MORE INFORMATION:

<http://www.technologystudent.com/prddes1/prddex1.html>



STEAM BENTWOOD PARTS

MINIMUM MATERIALS USED

SIMPLE BUT ELEGANT DESIGN

CURVES AND SWIRLS IN THE DESIGN

MINIMUM NUMBER OF PARTS



SIMPLE JOINTING TECHNIQUES

DESIGNED WITH DISTRIBUTION IN MIND

EASY ASSEMBLY AT RETAILER

PRECURSOR TO FLAT PACK FURNITURE

QUALITY MATERIALS SELECTED (BEECH)

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# MICHAEL THONET AND THE No 14 CHAIR - QUESTIONS

LINK FOR HELP

<http://www.technologystudent.com/prddes1/thonet1.html>

<http://www.technologystudent.com/prddes1/thonet2.html>

1. What is bentwood furniture? **4 marks**

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2. How was the manufacturing processes of Thonet 'bentwood' furniture', different to that of the Arts and Crafts Movement? **3 marks**

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3. It could be said that the Thonet No 14 chair, was the first ever flat packed furniture. What facts support this argument? **4 marks**

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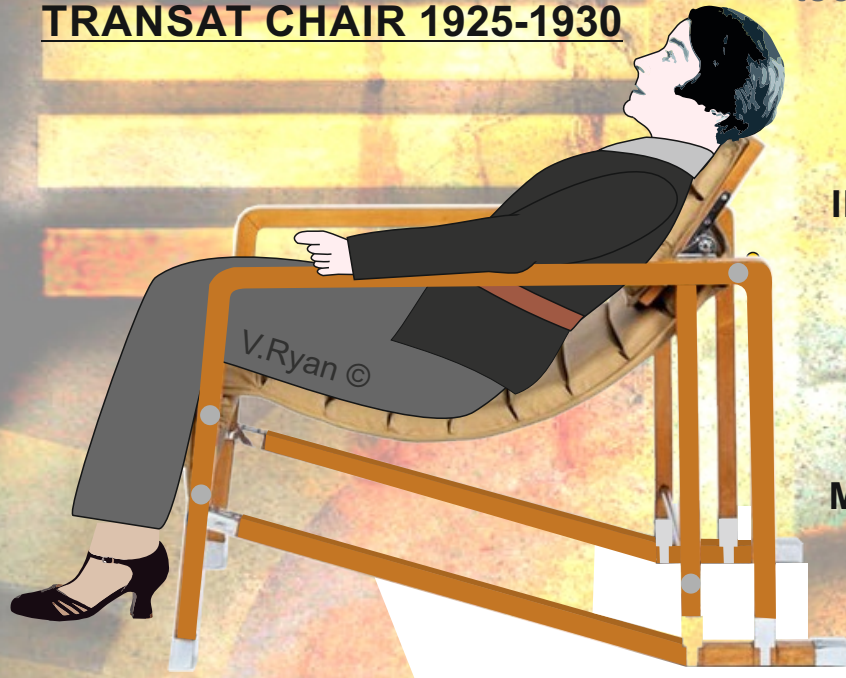
4. In the space available below, sketch the various parts of the Thonet No 14 Chair. **6 marks**



# EILEEN GRAY 1878 TO 1976

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## TRANSAT CHAIR 1925-1930



EILEEN GRAY WAS A MODERNIST DESIGNER, BORN IN ENNISCORTHY, IRELAND IN 1878. SHE WAS AN ARTIST, INTERIOR DESIGNER AND ARCHITECT. SHE SPENT HER EARLY YEARS TRAINING IN LONDON, BUT SPENT MOST OF HER TIME IN FRANCE. HER WORK CAN BE REGARDED AS BOTH FUNCTIONAL AND ARTISTIC. MUCH OF HER WORK WAS AT THE LEADING EDGE OF THE MODERNIST MOVEMENT AND WAS INFLUENCED BY THE ART DECO DESIGN MOVEMENT.

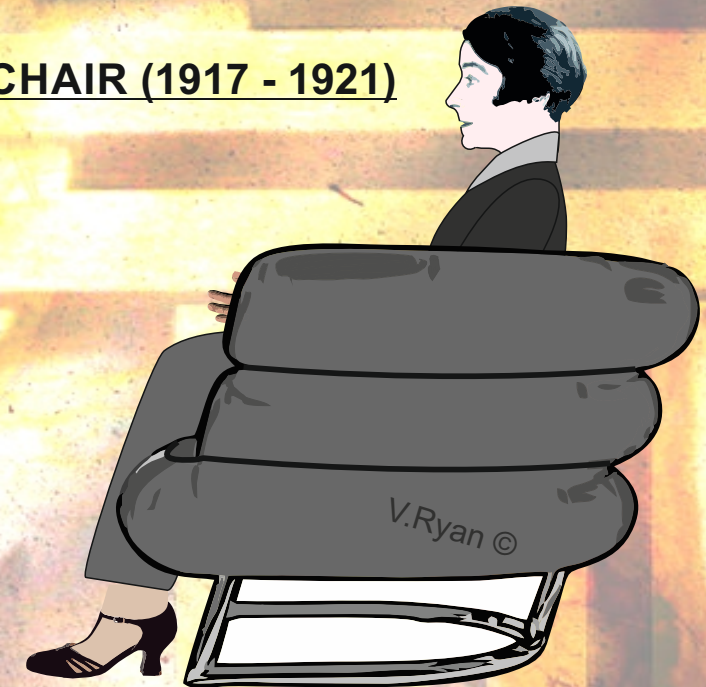


## THE E1027 TABLE - 1929



FOR MORE INFORMATION:  
<http://www.technologystudent.com/prddes1/prddex1.html>

## THE BIBENDUM CHAIR (1917 - 1921)





# EILEEN GRAY

V.Ryan © 2012 World Association of Technology Teachers

LINK FOR HELP <http://www.technologystudent.com/prddes1/egray1.html>  
<http://www.technologystudent.com/prddes1/gray2.html>

1. Complete the passage about Eileen Gray, by adding the missing key words / phrases in the correct places. The key words / phrases are listed below the paragraph. **8 marks**

Eileen Gray was a modernist designer, born in \_\_\_\_\_, Ireland in \_\_\_\_\_. She was an artist, \_\_\_\_\_ and architect. She spent her early years training in London, but spent most of her time in \_\_\_\_\_. Very few women worked in design during the early twentieth century, as this profession was male dominated.

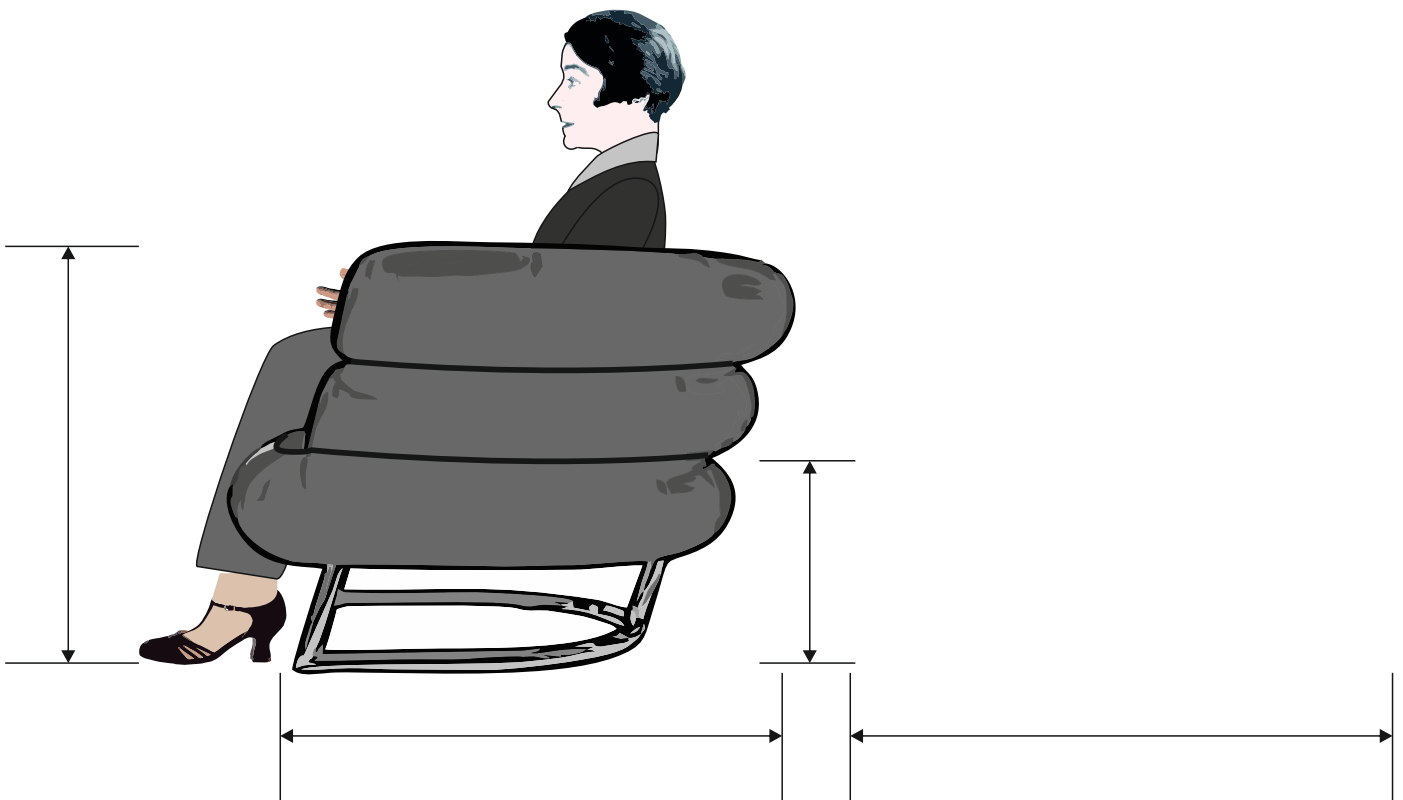
Her work has always been held in high regard by her fellow designers. Her designs were originally for \_\_\_\_\_ clients. However, it is only in recent years that her work has been celebrated by a wider audience. Since the \_\_\_\_\_, her designs have been manufactured on a larger scale and for a wider audience.

Her work can be regarded as both \_\_\_\_\_. Much of her work was at the leading edge of the \_\_\_\_\_ movement and was influenced in particular by the Art Deco design movement.

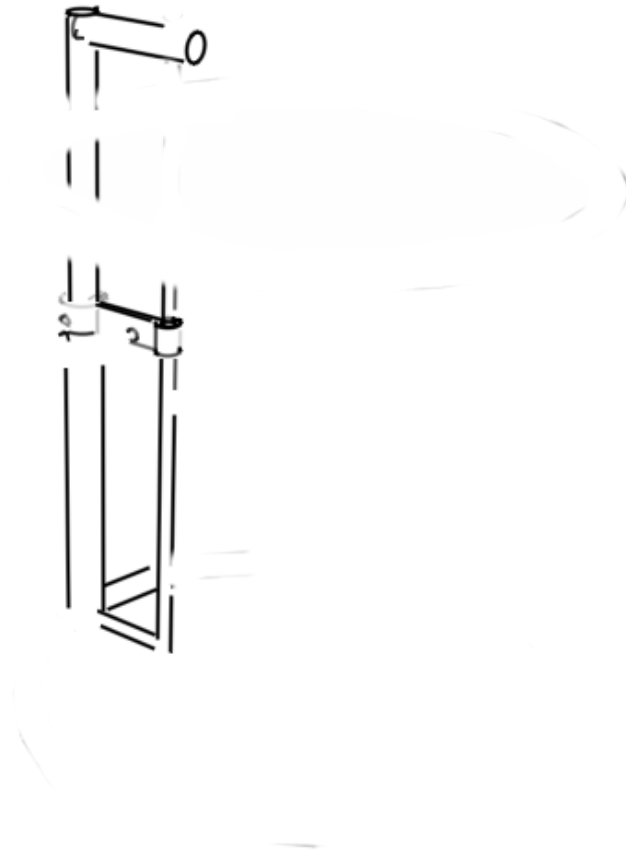
<b>1878</b>	<b>MODERNIST</b>	<b>INTERIOR DESIGNER</b>	<b>FRANCE</b>
<b>WEALTHY</b>	<b>ENNISCORTHY</b>	<b>FUNCTIONAL AND ARTISTIC</b>	<b>1970's</b>

2. What type of chair was the Transat Chair of 1925 - 1930 based on? **1 mark**

3. Add the front view of the Bibendum Chair to the orthographic drawing below. Add the dimensions. **4 marks**



4. Complete the sketch of the E1027 table. 4 marks



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4. Name the materials used to manufacture the E1027 table and describe the finish applied to each one. 2 marks

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5. Eileen Gray designed the table with her sister in mind. What was the purpose of the table? 2 marks

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6. Explain / describe the way the height of the table can be adjusted. 2 marks

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7. Which of Eileen Gray's designs is your favourite? Why? 3 marks

NAME: \_\_\_\_\_

WHY? \_\_\_\_\_

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# BETHAN GRAY - EXAMINATION QUESTIONS

LINK FOR HELP [www.technologystudent.com/despro\\_flesh/gray1.html](http://www.technologystudent.com/despro_flesh/gray1.html)

1. Describe the 'design' background of Bethan Gray. **4 marks**

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2. What features / characteristics often appear in Bethan Gray's work. **5 marks**

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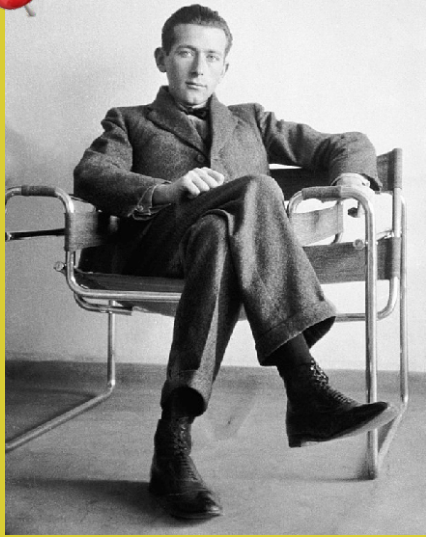
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3. A Bethan Gray 'table' is seen below. Identify each of the features / characteristics you listed in question 2, on the image. ( You can substitute alternative features, if you feel they are more relevant for this piece of work). **5 marks**



# MARCEL BREUER (1902-1981)



MARCEL BREUER WAS AN INFLUENTIAL MODERNIST DESIGNER AND MADE A SIGNIFICANT CONTRIBUTION TO THE BAUHAUS AND THE MODERNIST MOVEMENT. HE WAS BOTH AN ARCHITECT AND A DESIGNER, LIKE MANY OF THE INFLUENTIAL MODERNISTS, OF THE EARLY TO MID TWENTIETH CENTURY. BREUER PROMOTED THE USE OF MODERN MATERIALS, INCLUDING TUBULAR STEEL, A MATERIAL THAT HAD NOT BEEN USED PREVIOUSLY IN FURNITURE DESIGN. TUBULAR STEEL IS LIGHT, VERSATILE AND CHEAP. IT CAN BE JOINED, SHAPED AND FORMED IN DIFFERENT WAYS, OPENING UP NEW DESIGN POSSIBILITIES. THIS WAS THE DESIGN PHILOSOPHY OF THE BAUHAUS.

WASSILY OR B3 CLUB CHAIR- 1924



MB-118 CHAIR 1928



THE B5 CHAIR - 1926/27



THE B35 CHAIR - 1928



# MARCEL BREUER (1902-1981)

**LINK FOR HELP** [http://www.technologystudent.com/prddes\\_2/breuer1.html](http://www.technologystudent.com/prddes_2/breuer1.html)



1. What is the name of this chair? **1 mark**

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2. What year was it first manufactured ? **1 mark**

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3. Why can the chair be regarded as trend setting? **3 marks**

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THE B35 CHAIR - 1928

4. What is the name of the company that first manufactured this chair? **1 mark**

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5. The company named in question 4, also manufactured an extensive range of unusual furniture. What was the name of range? **1 mark**

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6. Name the chair shown opposite. **1 mark**

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6. Write a short description of the chair. **3 marks**

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**ROBIN DAY (1915-2010), TRAINED AT THE ROYAL COLLEGE OF ART IN THE 1930S. HE WAS A FURNITURE DESIGNER, BEST KNOWN FOR HIS INNOVATIVE DESIGN OF THE POLYPROP CHAIR IN 1963, ALTHOUGH THIS WAS NOT HIS ONLY RECOGNISED DESIGN. THE POLYPROP CHAIR WAS MANUFACTURED FROM POLYPROPYLENE, THROUGH INJECTION MOULDING. THE DESIGN BECAME A TREND SETTER FOR CHEAP, QUALITY, MASS MANUFACTURED, STACKABLE CHAIRS.**

# THE DESIGNER ROBIN DAY

**Low cost storage unit  
the MoMA Prize, 1949**



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**IN 1951 AT THE FESTIVAL OF BRITAIN, ROBIN DAY INTRODUCED FURNITURE HE HAD DESIGNED. ONE OF THESE DESIGNS, WAS THE 'LOUNGE ARMCHAIR', CONSTRUCTED FROM INNOVATIVE MATERIALS SUCH AS PLYWOOD, WHICH HAD SEEN INCREASED USE DURING THE SECOND WORLD WAR. ROBIN DAY WAS INFLUENCE BY MODERNISM AND THE STYLE OF THE BAUHAUS.**

**Robin Day. Hillestak chairs, for S Hille & Co, UK 1950.**

**Royal Festival Hall Lounge Armchair, 1951**

**Polyprop Chair  
1963**



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# THE DESIGNER ROBIN DAY

LINK FOR HELP

<http://www.technologystudent.com/prddes1/robinday1.html>  
[http://www.technologystudent.com/prddes\\_2/robinday1.html](http://www.technologystudent.com/prddes_2/robinday1.html)  
<http://www.technologystudent.com/prddes1/polyprop2.html>

1. Who was Robin Day? **3 marks**

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2. In what year was the Hilestak chair designed? **1 mark**

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3. Sketch the Hilestak chair and describe some of its features.  
**4 marks**

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4. When did Robin Day design the Lounge Armchair? **1 mark**

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5. Sketch the Lounge Armchair and describe some of its features.  
**4 marks**

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# OWEN MACLAREN - TECHNOLOGY TRANSFER AND THE MACLAREN B-01 BUGGY



Owen Maclaren is best known for his innovative design of a lightweight folding baby carrier. In addition, he designed the undercarriage of the famous Spitfire. The new undercarriage design, allowed the plane to manoeuvre whilst on the ground and the wheels to fold into the wings, creating an aerodynamic shape.

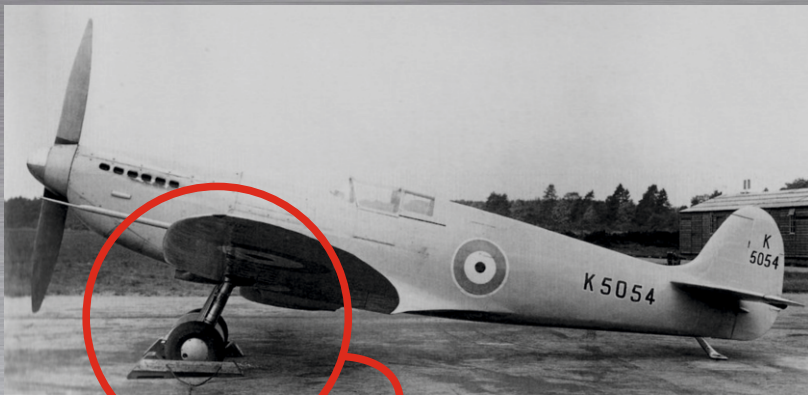
## Why is the Maclaren B01 folding push chair regarded as an iconic design? Why was it so influential?

The B01 was the first folding push chair and it inspired other designers to follow suit, with a range of lightweight folding products. The high standard of his design and level of innovation set a high bench mark, that other designers tried to meet. His B-01 push chair, was a vast improvement on past designs and set new standards in terms of the materials used, folding capabilities and aesthetics.

Maclaren's use of aluminium tube was new to the design of everyday products, such as push chairs. After the introduction of the Maclaren B01, aluminium was considered as the main material for many other products. The manufacturing techniques introduced by Maclaren, in the manufacture of the push chair, have been utilised ever since.

The Maclaren B01 'stood out' from other similar products in the 1960s and is still in production today (albeit, an improved version). It has stood the test of time, which is another characteristic of an iconic product.

## TECHNOLOGY TRANSFER FROM SPITFIRE TO CHILD'S BUGGY



FRONT VIEW

SIDE VIEW

FOLDED BUGGY

# OWEN MACLAREN AND THE MACLAREN B-01 BUGGY - QUESTIONS

LINK FOR HELP <http://www.technologystudent.com/prddes1/owen1.html>

1. What did Owen Maclaren design and manufacture before he developed the B01 Buggy? **2 marks**

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2. When was the design of the B01 Buggy patented? **1 mark**

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3. When did the B01 buggy become available in the shops? **1 mark**

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4. What inspired Owen Maclaren to design a lightweight manoeuvrable buggy? **2 marks**

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5. Compare the two push chairs below, in terms of size, weight, ability to fold and aesthetics. **4 marks**

**TYPICAL CHILD'S PUSH CHAIR 1960s**



**A MACLAREN CHILD'S PUSH CHAIR**



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# BASIC PRINCIPLES IN THE DESIGN OF A CHILD'S BUGGY - QUESTIONS

**LINK FOR HELP** [http://www.technologystudent.com/prddes\\_2/maclaren2.html](http://www.technologystudent.com/prddes_2/maclaren2.html)

1. Compared to steel, why is aluminium tube a good choice for the manufacture of a child's push chair / buggy? **3 marks**

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2. What should be avoided when designing a child's push chair, selecting the materials and developing the folding mechanism? **3 marks**

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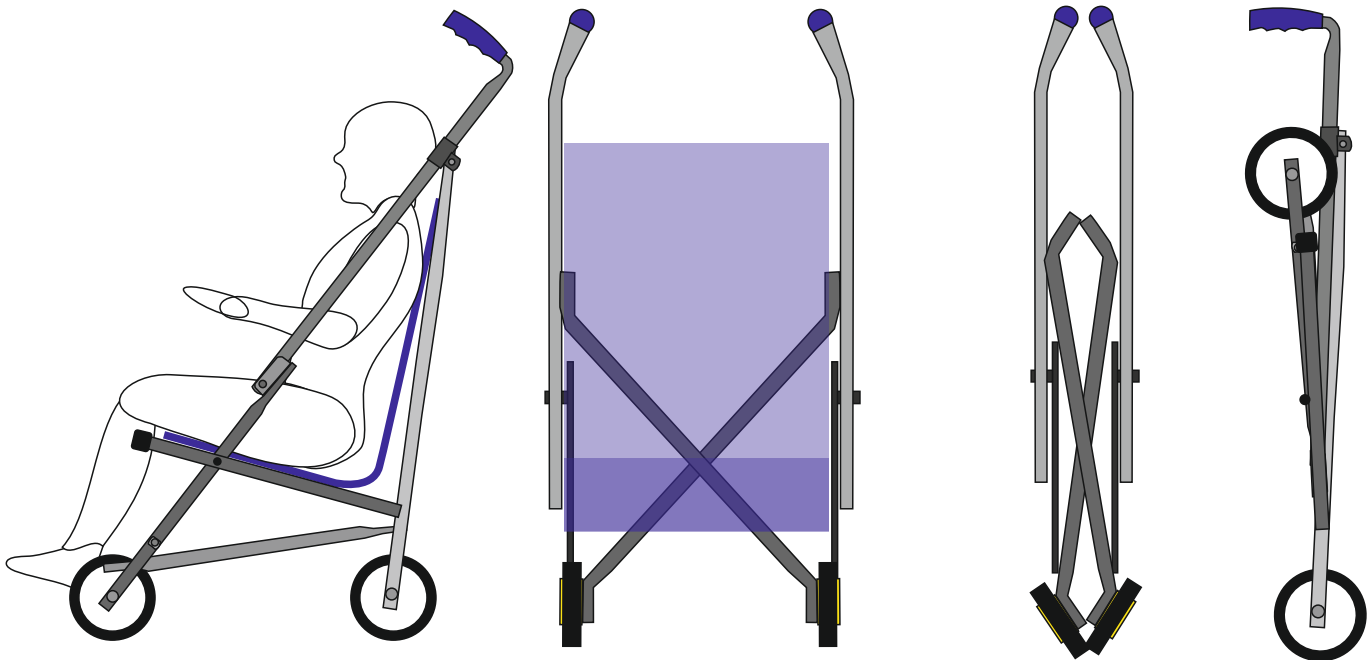
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3. Study the simplified push chair seen below. If you were the designer, what notes would you add to the drawings? **ADD YOUR NOTES IN THE SPACE BELOW THE DRAWINGS. 4 marks**

**SIDE VIEW**

**FRONT VIEW**

**FOLDED CHAIR  
FRONT AND SIDE VIEWS**



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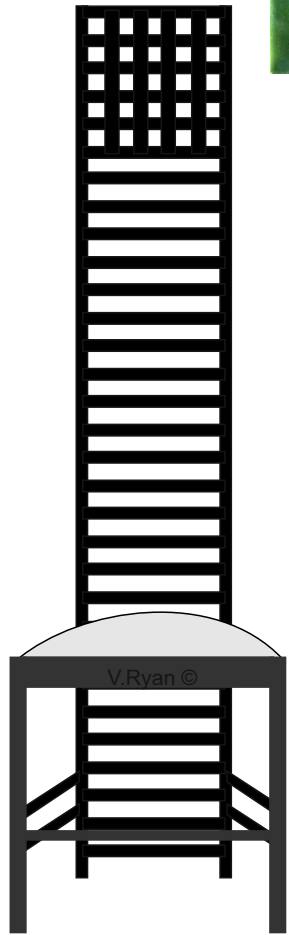
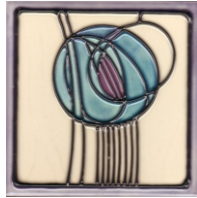
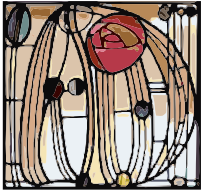
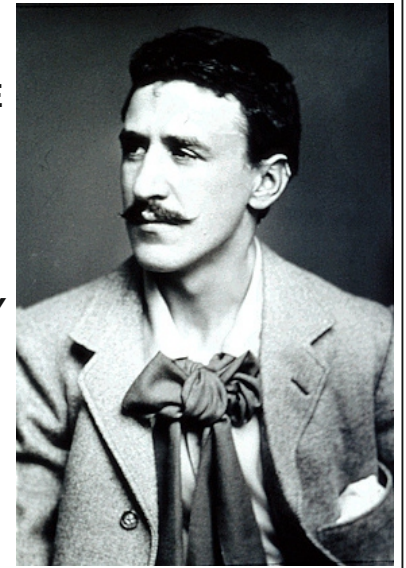
4. On the back of this paper, sketch and describe one improvement you would make to the design. **5 marks**



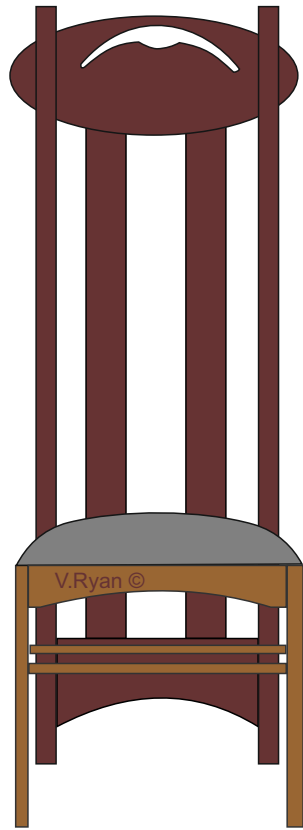
# CHARLES RENNIE MACKINTOSH

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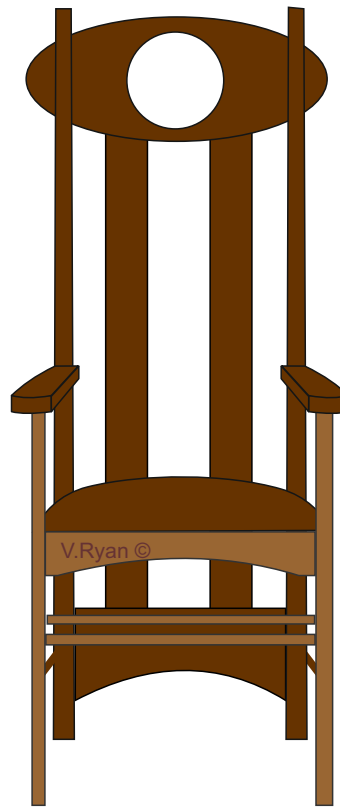
CHARLES RENNIE MACKINTOSH (1868 TO 1928) - RENOWNED SCOTTISH DESIGNER AND ARCHITECT. HE ALSO PRODUCED FLORAL WATERCOLOURS, LANDSCAPE WATERCOLOURS, TEXTILE DESIGNS AND INTERIOR DESIGNS. HIS FURNITURE IS ESPECIALLY MEMORABLE AND THEIR INNOVATIVE DESIGN WAS IMPORTANT, AT A TIME OF CHANGE FROM ART NOUVEAU TO MODERNISM. MANY OF HIS DESIGNS WERE INFLUENCED BY ART NOUVEAU AND THE ARTS AND CRAFT MOVEMENT AND BY JAPANESE STYLE AND DESIGN. HE OFTEN INCLUDED FLORAL PATTERNS AND CELTIC ART, AS SIMPLE DECORATION.



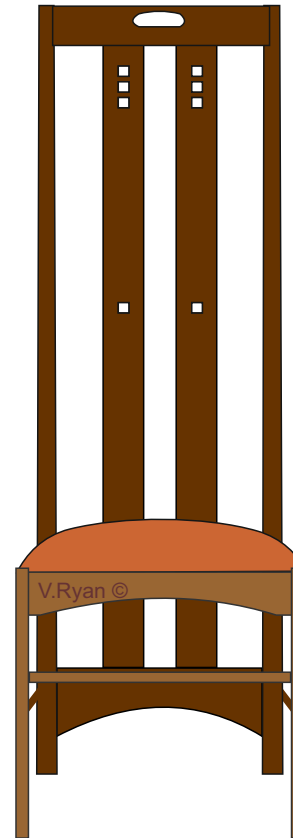
Hill House Chair  
1903



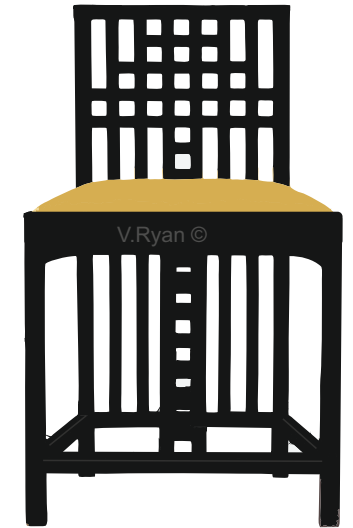
Argyle Chair  
1897



High Back Chair  
1899



INGRAM CHAIR  
1903



CHAIR DESIGNED FOR  
HOUS' HILL, 1904

# CHARLES RENNIE MACKINTOSH

LINK FOR HELP <http://www.technologystudent.com/joints/rennie1.html>

1. What Nationality was Charles Rennie Mackintosh? **1 mark**

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2. What is the name of the building, for which he designed the impressive facade? **1 mark**

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3. Explain how Mackintosh's designs were influenced by other styles. **4 marks**

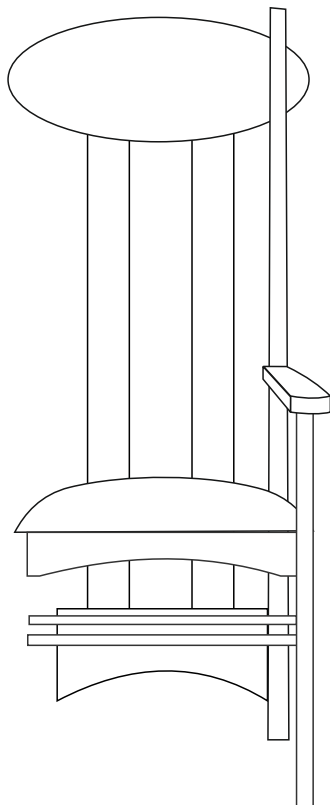
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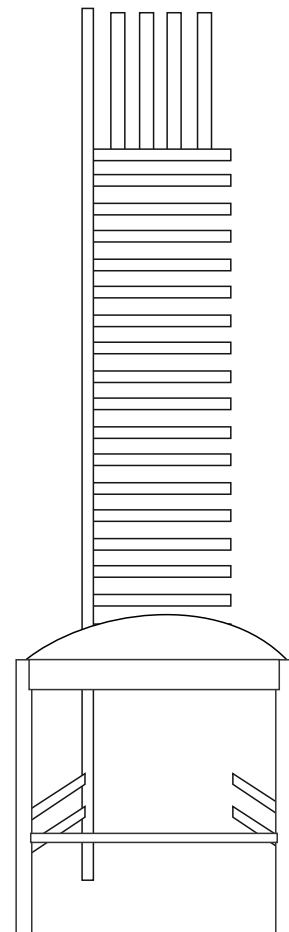
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4. Complete the drawings of the two Charles Mackintosh chairs, adding the missing detail and appropriate colour and shade. **6 marks**



High Back Chair  
54 x 137 x 48  
1899

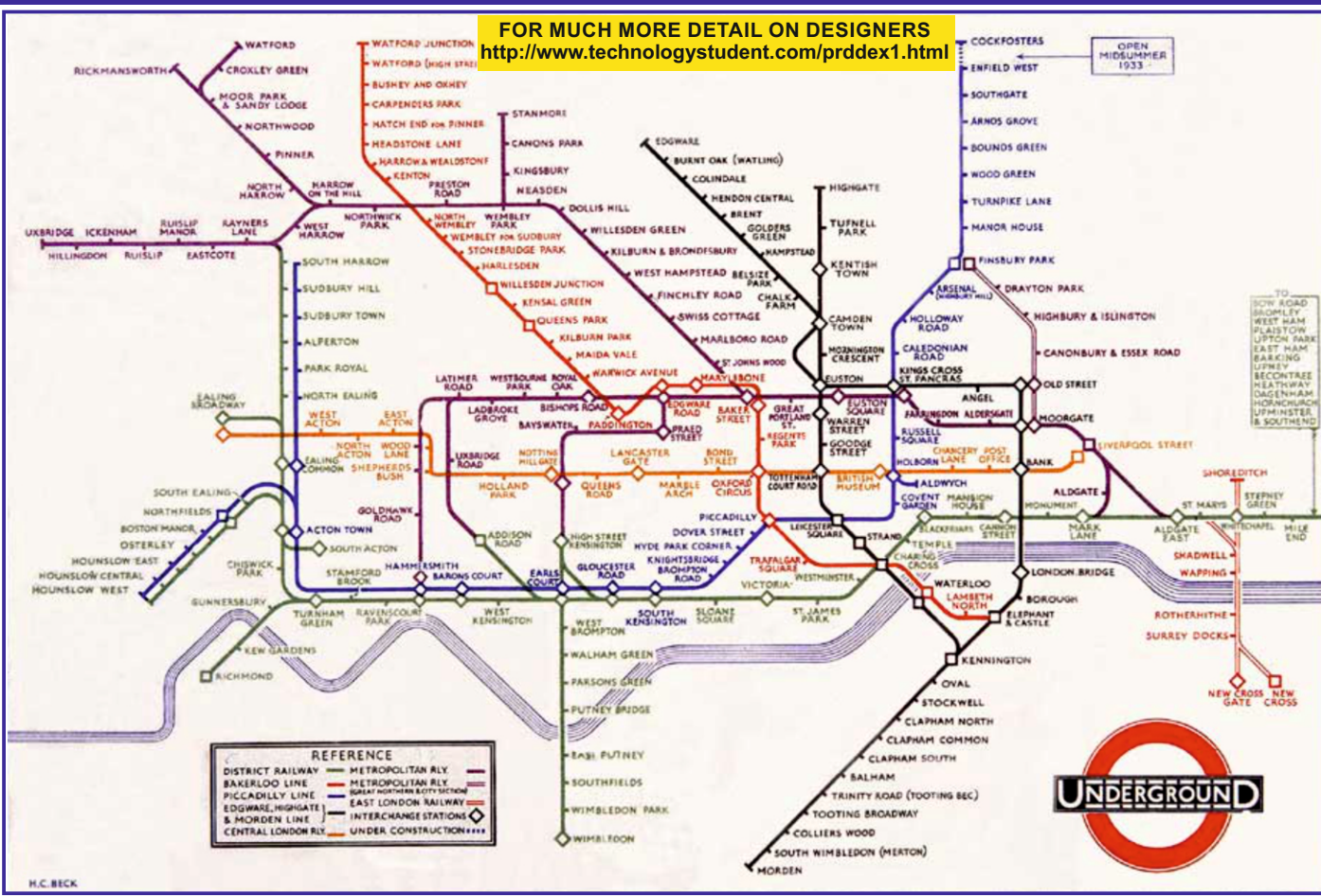


Hill House Chair  
42 x 140 x 35.  
1903-1903

# HARRY BECK (1902 - 1974) - THE LONDON UNDERGROUND MAP

**HARRY BECK WAS AN ENGINEERING TECHNICAL DRAFTSMAN, WORKING FOR THE LONDON UNDERGROUND SIGNALS OFFICE. HE DEVELOPED AN INTEREST IN THE WAY RAIL TRANSPORT MAPS WERE GRAPHICALLY PRESENTED. BECK'S ICONIC LONDON UNDERGROUND MAP WAS FIRST PUBLISHED IN 1932. IT WAS VERY WELL RECEIVED BY TRAVELLERS AND COMMUTERS. BECK'S LONDON UNDERGROUND MAP, IS NOW REGARDED AS AN ICONIC DESIGN, AS IT HAS INSPIRED OTHER MAP LAYOUTS THROUGHOUT THE WORLD.**

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**THE INNOVATIVE 'STYLE' OF MAP THAT BECK INTRODUCED, HAS BEEN ADAPTED FOR A VAST RANGE OF DIAGRAMMATIC PRESENTATIONS. IT SET A HIGH BENCHMARK FOR OTHER MAP DESIGNERS TO FOLLOW. THE MAP PROVIDES ALL THE NECESSARY INFORMATION REQUIRED BY A TRAVELLER AND NO UNNECESSARY DETAIL OR DECORATION. IT IS STRICTLY FUNCTIONAL AND YET CAN BE REGARDED AS PIECE OF ART, REFLECTING A MODERNIST PHILOSOPHY. IT IS AESTHETICALLY PLEASING.**



# HARRY BECK AND THE LONDON UNDERGROUND MAP

**LINK FOR HELP** [http://www.technologystudent.com/prdeds\\_2/beck1.html](http://www.technologystudent.com/prdeds_2/beck1.html)

1. What was Harry Beck's role at the London Underground Signals Office? **1 mark**

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2. How did a typical underground map by F.H. Stingemore, differ to a geographical map? **3 marks**

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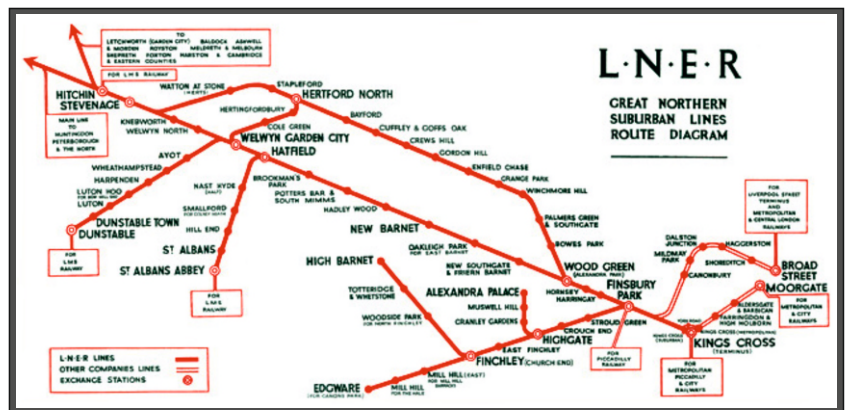
3. The map shown opposite were often situated inside trains during the 1920s.

Who designed the map? **1 mark**

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This type of map had a particular name. What was it? **1 mark**

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4. Harry Beck did not get paid for his original London Underground Map. What were his personal circumstances that led to the design? **2 marks**

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5. How does Harry Beck's map differ from the underground maps that came before it? **4 marks**

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6. Why is Harry Beck's underground map regarded as an iconic design? **3 marks**

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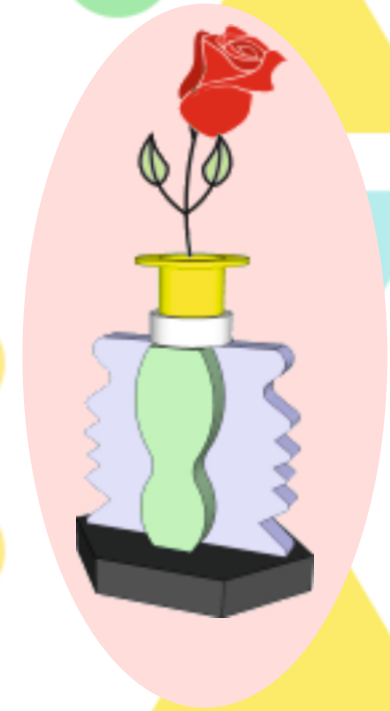
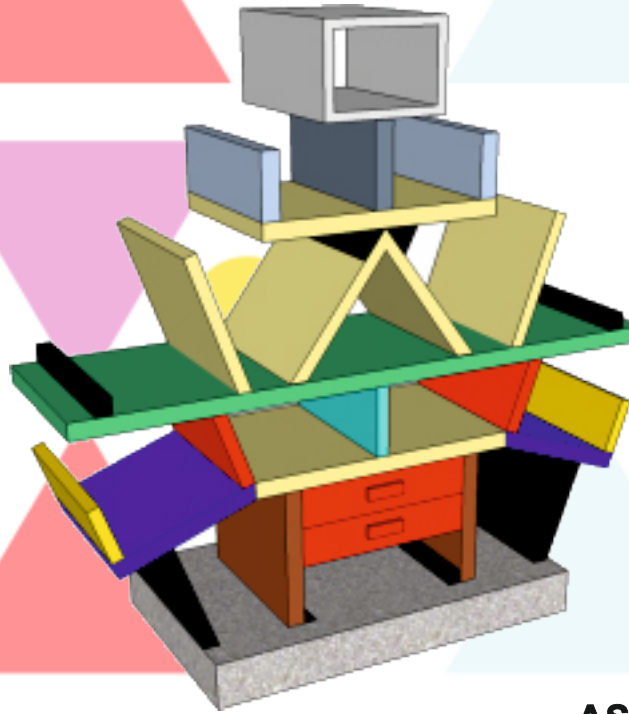
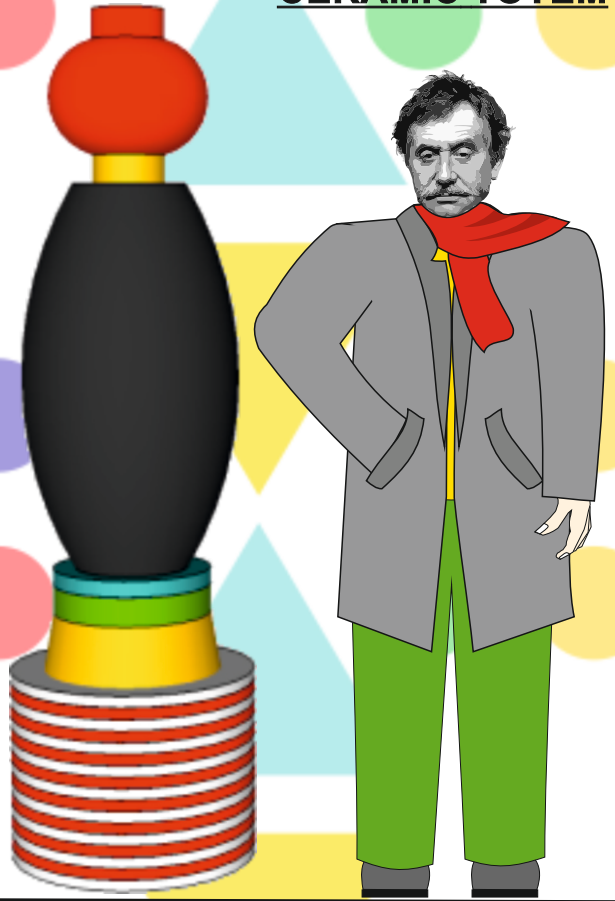
# ETTORE SOTTASS

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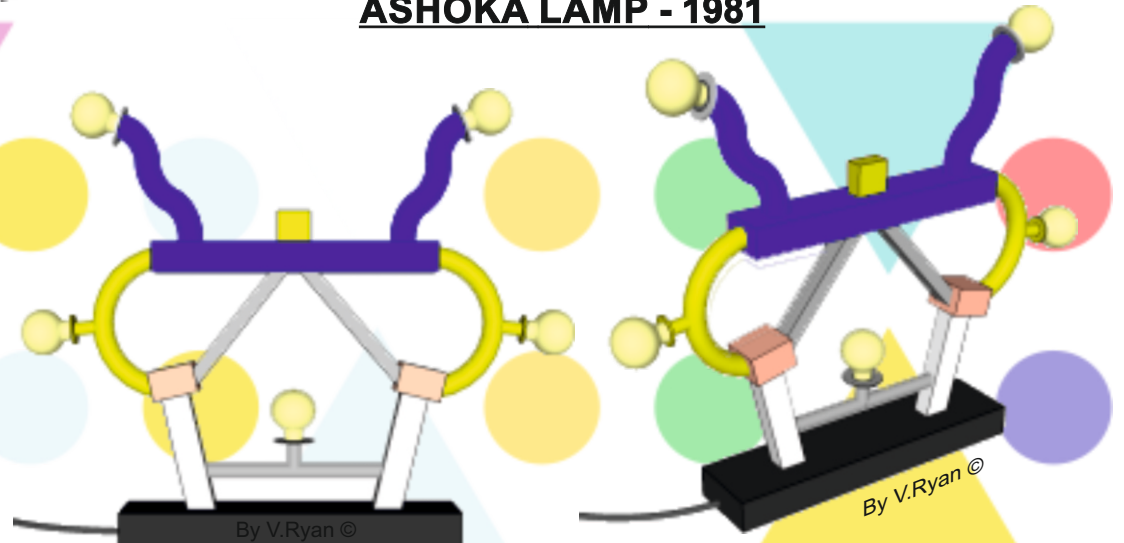
**CERAMIC TOTEM**

**THE CARLTON DRESSER - 1981**

**THE ARTICOLO 6000 VASE**



**ASHOKA LAMP - 1981**



SOTTASS'S DESIGN WORK WILL BE LARGELY REMEMBERED FOR HIS WORK WITH THE MEMPHIS DESIGN GROUP OF THE 1980S. HE BELIEVED IN REPLACING THE RESTRICTIVE CLASSICAL / TRADITIONAL DESIGNS OF THE PAST, WITH MODERN FREE THINKING, CREATING A NEW STYLE OF DESIGN.

# ETTORE SOTTASS

**LINK FOR HELP** <http://www.technologystudent.com/prddes1/ettore1.html>

Ettore Sottsass delighted audiences and potential customers alike, by designing items that were unusual, with bright colour schemes, producing imaginary designs of everyday objects.

Sottsass believed in design being different and not following tradition. To Sottsass, design was a continuation of fashion. His designs were usually received with shock followed by controversy.

A good example of this is the 'Ashoka' Lamp (1981, named after an Indian Emperor). Sottsass spent time in India in the early 1960s and this experience influenced some of his designs.

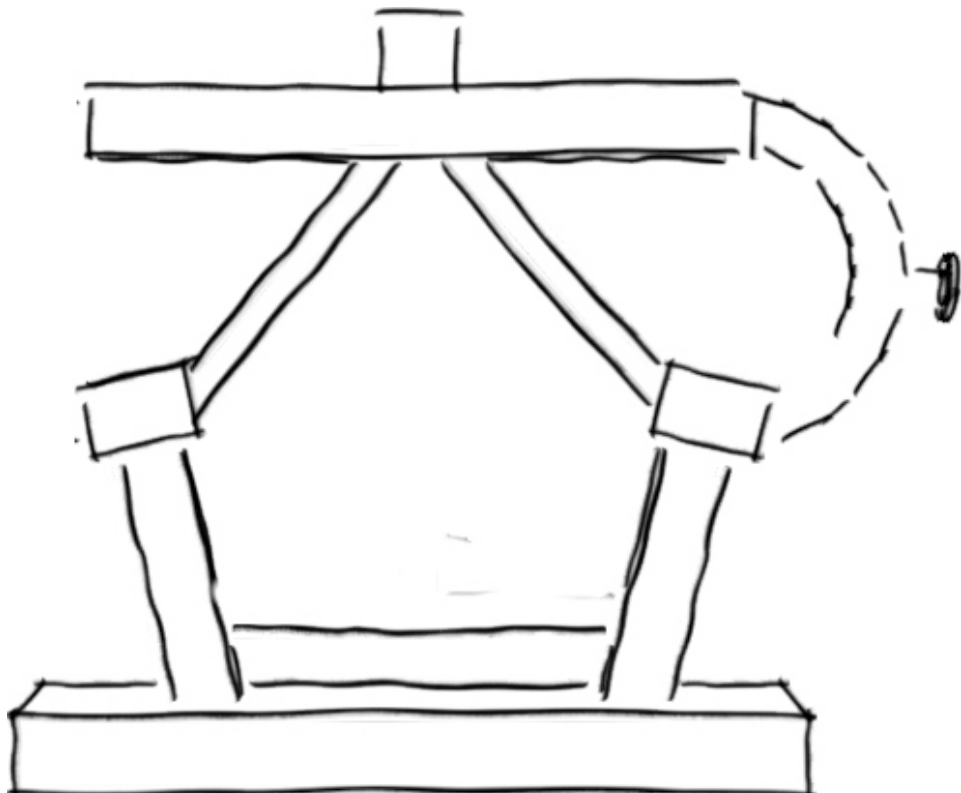
A good example is the lamp partially drawn below.

Name the lamp: **1 mark** \_\_\_\_\_

In what year was the lamp made? **1 mark** \_\_\_\_\_

Who was the lamp named after? **1 mark** \_\_\_\_\_

Complete the drawing of the lamp. Include colour and add the measurement for the height. **6 marks**



# CERAMIC TOTEM - by Ettore Sottsass

**LINK FOR HELP** <http://www.technologystudent.com/prddes1/ettore2.html>



Ceramic Totem designed by Ettore Sottsass, is seen opposite.

Sketch an outline of an average sized adult alongside it, to indicate its height. **2 marks**

Add the height dimension to the totem. **1 mark**

Add colour to the ceramic totem. You must add the original colours, in the correct places. **3 marks**

What was the totem coated with and what was its affect? **2 marks**

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Complete the sketch of the vase designed by Ettore Sottsass. **2 marks**

Add the correct colours. **2 marks**

What is the name of the vase? **1 mark**

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Add the height dimension of the vase. **1 mark**



