



Oxford Cambridge and RSA

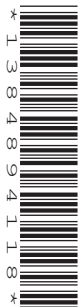
Tuesday 18 June 2024 – Morning

GCSE (9–1) Design and Technology

J310/01 Principles of Design and Technology

Insert

Time allowed: 2 hours



INSTRUCTIONS

- Use this Insert to answer the questions in Section B.
- Each question tells you which part of the Insert to refer to.
- Do **not** send this Insert for marking. Keep it in the centre or recycle it.

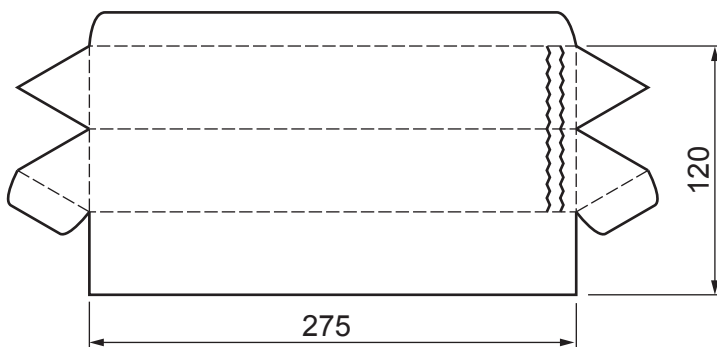
INFORMATION

- This document has **8** pages.

Product 1: Toblerone packaging (papers and boards)

Designed in 1908 by Swiss chocolate manufacturer, Theodor Tobler.

Item	Material	Other information
Toblerone package	320 gsm cardboard	Three colour print
Foil wrapping	Aluminium foil	



- ~~~~~ perforation
 - - - - - fold line
 ——— cut line

Net (development) of package

All dimensions in mm



Product 2: Levi denim jeans (fibres and fabrics)

In 1873, Levi Strauss & Co. partnered with Jacob Davis to officially patent the first denim jeans that had riveted pockets.

Item	Material	Other information
Jeans	Denim	Double stitched with pockets, belt loops and labels
Rivets	Copper	
Button and zip	Brass	



coloured tag to show Jean style

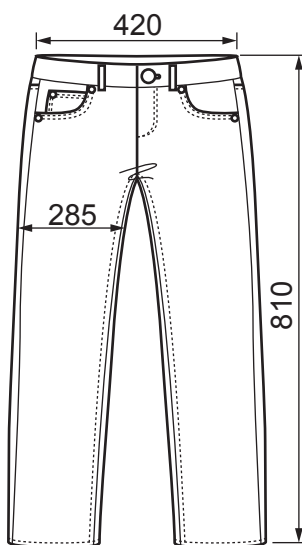
leather label with logo



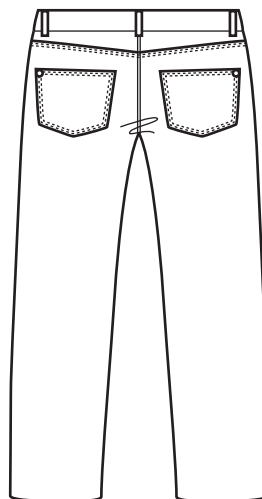
back pockets

button

zip

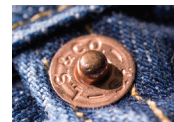


front



back

rivet



All dimensions in mm

Product 3: Anglepoise lamp (design engineering)

The Anglepoise lamp is a balanced-arm lamp first designed in 1932 by British designer George Carwardine.

Item	Material	Other information
Base	Cast iron	Formed from one piece
Spring	Stainless steel	
Frame/arm	Mild steel	Square tube



All dimensions in mm

Product 4: Coca-Cola bottle (polymers)

The first glass Coca-Cola bottle was designed in 1915 by the Root Glass Company. The polymer bottle was introduced in 1994.

Item	Material	Other information
Bottle	PET (polyethylene terephthalate)	Moulded to shape
Lid	HDPE (high density polyethylene)	Moulded to shape
Sleeve	PET (polyethylene terephthalate)	Printed



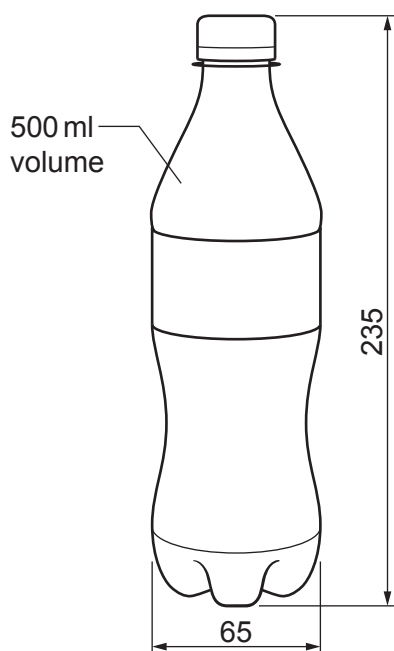
sleeve



screw top lid with grips



moulded detail on bottle



All dimensions in mm

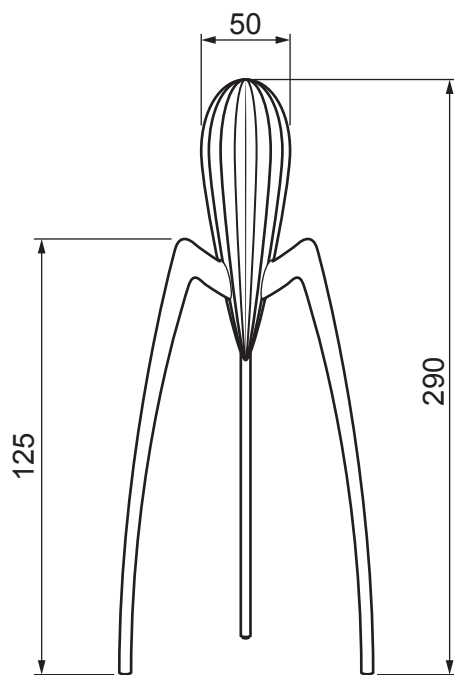
Product 5: Juicy Salif citrus squeezer (metals)

The Juicy Salif citrus squeezer was designed by Phillippe Starck for Alessi in 1990.

Item	Material	Other information
Body	Aluminium	Formed from one piece
Feet	Rubber	

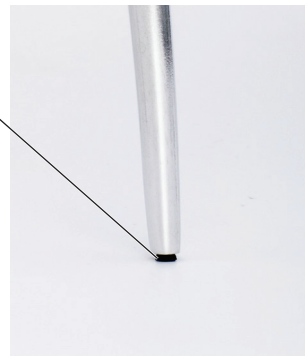


body



All dimensions in mm

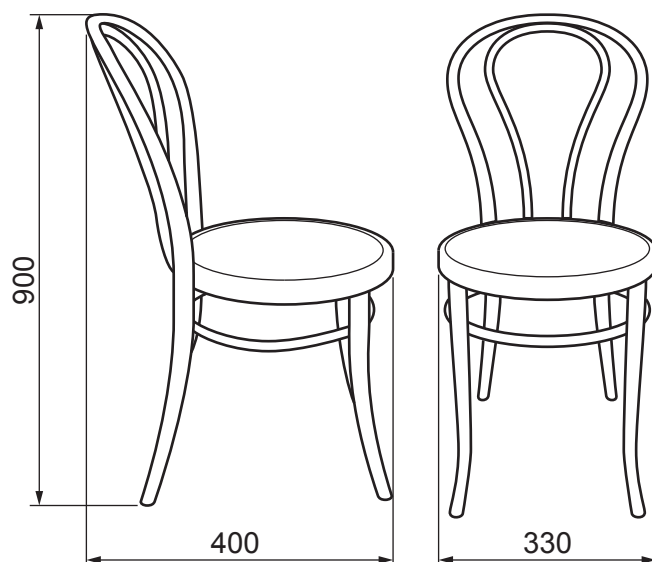
rubber foot



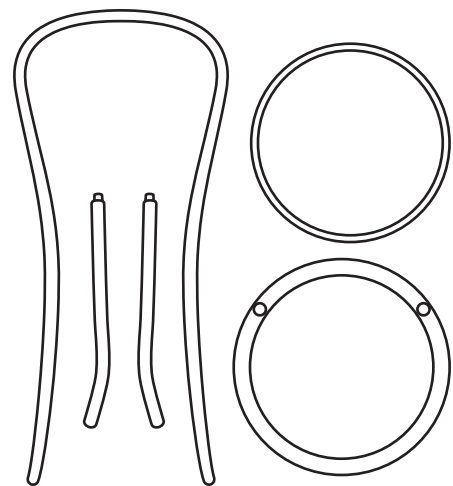
Product 6: Thonet bistro chair (timbers)

The No. 14 chair also known as the 'bistro chair', was the first mass produced chair sold as a flat pack. It was designed by Michael Thonet in 1859.

Item	Material	Other information
Chair frame	Beech	Bent to shape
Seat	Plywood	Beech veneer



All dimensions in mm



Examples of chair frame parts that are screwed together

Information on this page is required to answer **Question 4**.

Image A



Image B



Image C



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