OCR
Oxford Cambridge and RSA

Wednesday 15 June 2022 – Afternoon
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: Egg box and sleeve (papers and boards)

Item	Material	Other information
Egg box	Paper pulp	Moulded to shape
Paper sleeve	Recycled paper	Printed, cut and glued

Moulded egg box

Eggs

Paper sleeve

OCR
Eggs

100

70

250
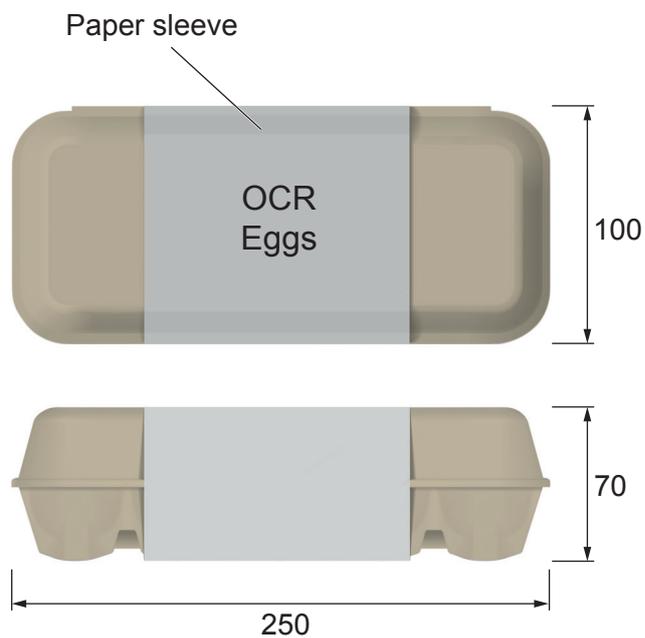
All dimensions in mm

Product 2: Hessian shopping bag (fibres and fabrics)

Item	Material	Other information
Bag	Hessian (Jute)	Double machine-stitched with a folded edge
Handle	Cotton canvas	
Logo	–	Printed

Logo

Close-up of the handle where it is stitched to the bag

300

150

500
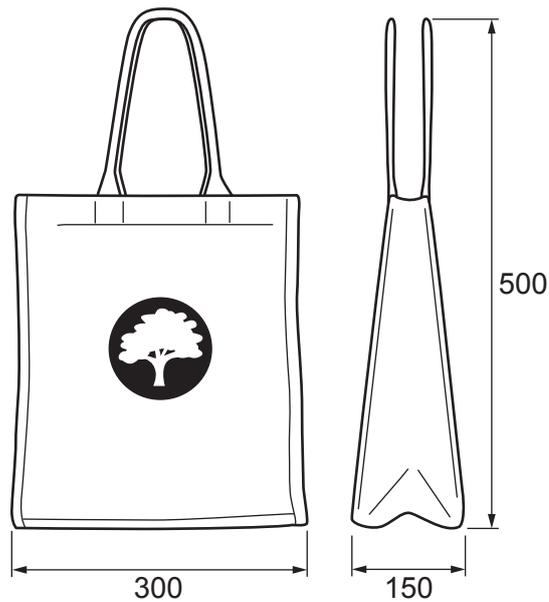
All dimensions in mm
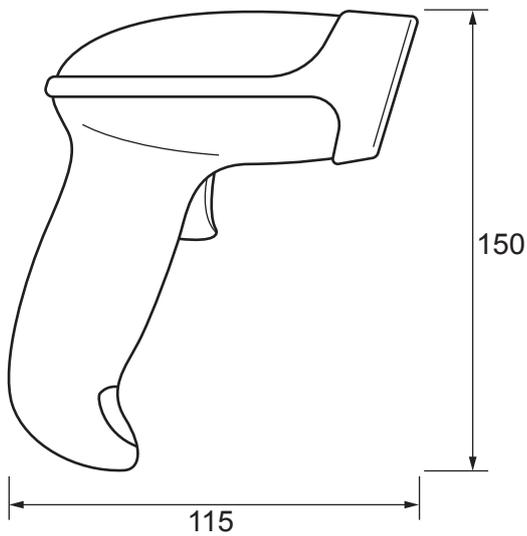
Product 3: Barcode scanner (design engineering)

Item	Material	Other information
Casing	ABS polymer	Injection moulded
Printed circuit board (PCB)	Composite PCB and components	Etched copper layer with soldered surface components

The barcode scanner in use
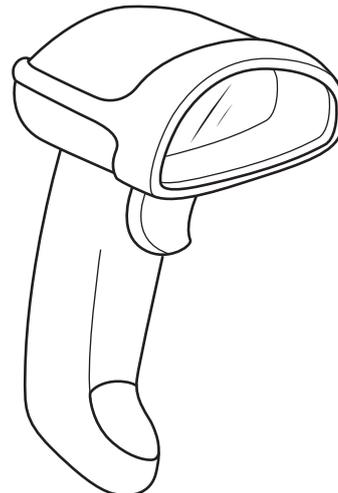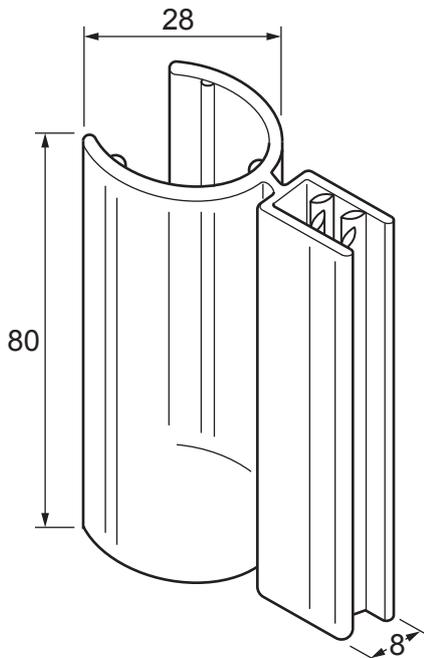

Casing

150
115
All dimensions in mm

Casing and PCB

Product 4: Display sign gripper (polymers)

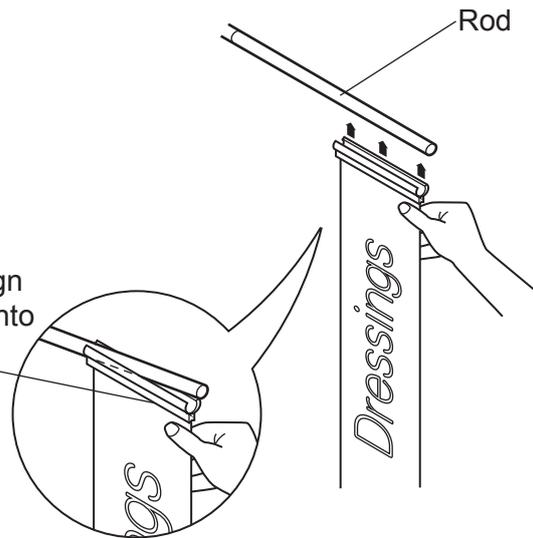| Item	Material	Other information
Display sign gripper	Clear PVC (polyvinyl chloride)	Extruded The gripper clips onto a rod holding the banner in place

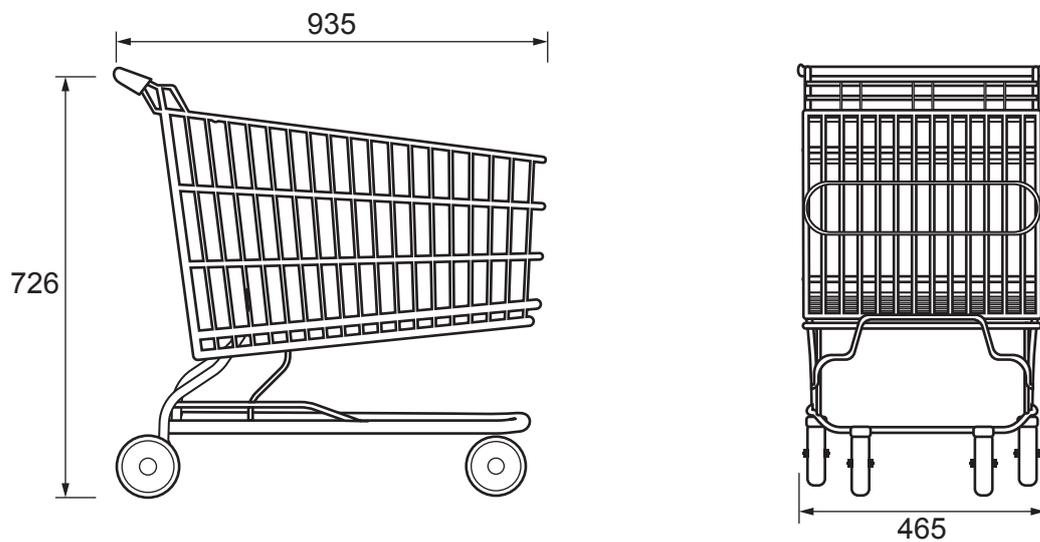Display sign gripper

Banner

Display sign gripper

28

80

8

Display sign gripper

Rod

The display sign gripper clips onto the rod

Dressings

All dimensions in mm

Turn over

Product 5: Shopping trolley (metals)

Item	Material	Other information
Trolley basket and frame	Low-carbon steel	Cut, formed and welded Zinc coated

Trolley basket

Trolley frame

935

726

465

All dimensions in mm

Product 6: Wooden crate (timbers)

Item	Material	Other information
Crate	Pine	Sawn, drilled and dowel jointed Oil-based finish

150

350

250

All dimensions in mm

Turn over

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

Image A

Image B

security tag

Image C