

Answer ONE question only.

1 After use, hair straighteners are too hot to store.

A unit to support the hair straightener whilst cooling is required.

Data

- Market research has indicated that there is a potential demand for an initial minimum of 10,000 products.
- Fig. 1 is an illustration of a hair straightener giving sizes.

Theme: Electrical hair styling products.

Focus Materials: Resistant Materials.

An illustration has been removed due to third party copyright restrictions

Details:

An illustration of some hair straighteners with the following measurements:

Length	250
Width	35
Widest jaw Opening	80

Fig. 1

ALLOCATION OF MARKS FOR PAPER 2524/02

- | | |
|--|------|
| (a) specification points. | [16] |
| (b) initial ideas. | [38] |
| (c) features suitable for development. | [8] |
| (d) communication skills and techniques. | [10] |

[Total : 72]

All dimensions are in mm.

Where necessary, calculators may be used.

2 A retailer wants to promote sales by supplying a free gift to customers who purchase a new T.V. or Sound System.

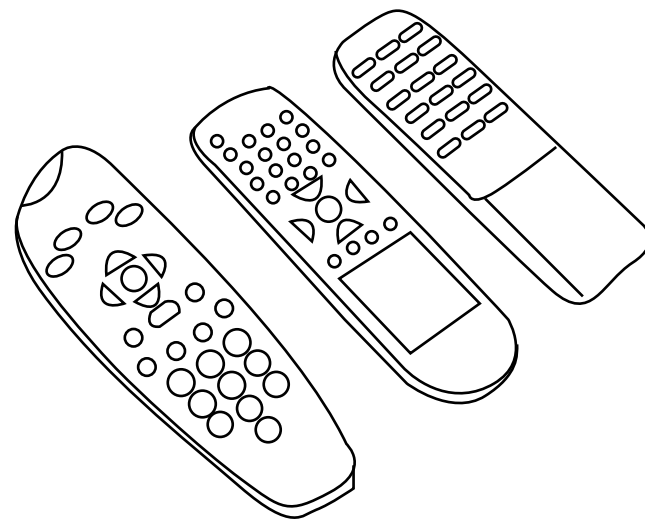
A product which will store up to five remote control devices is required.

Data

- Market research has indicated that there is a potential demand for an initial minimum of 25,000 products.
- Fig. 2 shows the maximum and minimum sizes of a typical remote controller.

Theme: Storage of small items.

Focus Materials: Resistant Materials/Textiles/Graphic Products.



	length	width	thickness
Minimum	150	40	18
Maximum	200	60	25

Fig. 2

3 A company that specializes in camping equipment has identified a need for a modular collapsible table.

A table for 2 people that can be connected to identical tables is required.

Data

- Market research has indicated that there is a potential demand for an initial minimum of 10,000 products.
- Fig. 3 gives appropriate anthropometric data.

Theme: Camping Equipment.

Focus Materials: Resistant Materials.

	5th %ile	Men 50th %ile	95th %ile	5th %ile	Women 50th %ile	95th %ile
1.	1625	1740	1855	1510	1510	1710
2.	1515	1630	1745	1405	1505	1605
3.	1315	1425	1535	1215	1310	1405
4.	1005	1090	1175	930	1005	1080
5.	840	920	1000	740	810	880
6.	690	755	820	660	720	780
7.	590	655	720	560	625	690
8.	850	910	970	790	850	910
9.	730	790	850	685	740	795
10.	540	595	650	605	555	605
11.	195	245	295	125	155	185
12.	135	160	185	125	155	185
13.	545	595	645	520	570	620
14.	440	495	550	435	480	530
15.	495	545	595	455	500	545
16.	390	440	490	355	400	495
17.	420	465	510	355	395	435
18.	310	360	410	305	370	435
19.	215	250	285	205	250	295
20.	220	270	320	205	255	305

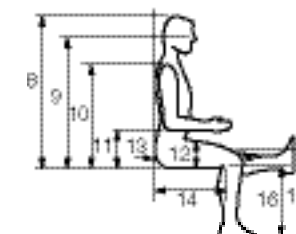
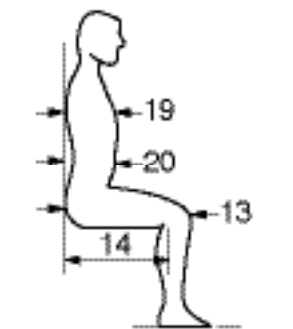
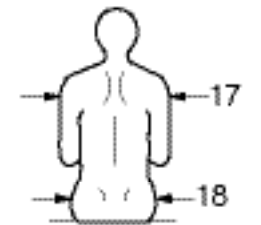
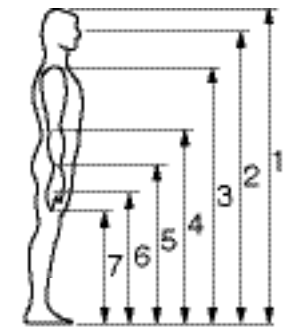


Fig. 3

- 4 Clothing accessories are difficult to store in a wardrobe.
A product or system to store either 50 men's ties or woman's silk scarves is required.

Data

- Market research has indicated that there is a potential demand for an initial minimum of 50,000 products.
- The product should fit inside an existing wardrobe.

Theme: Bedroom storage.

Focus Materials: Resistant Materials/Textiles/Graphic Products.

- 5 A confectionary company is about to launch a new soft sweet called 'Geojellies' that come in different geometric shapes.

A dual purpose container for transportation and point-of-sale display, which represents the name of the sweets, is required.

Data

- Market research has indicated that there is a potential demand for an initial minimum of 10,000 products.
- The product should contain 48 of the packets shown in Fig. 4.
- Fig. 4 is a drawing of clear sweet packaging showing geometric shaped sweets.

Theme: Confectionery.

Focus Materials: Graphic Products.



Fig. 4

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Circle the question number you are answering

1 2 3 4 5

DO NOT WRITE IN THIS SPACE

(a) A list of **eight** qualified specification points, directly related to the given situation, that initial ideas should meet. [16]

1 _____

2 _____

3 _____

4 _____

5 _____

6 _____

7 _____

8 _____

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(b) Initial ideas:

- Range of ideas. [10]
- Design ideas relating to the functional aspects raised in your specification. [5]
- Quality of design thinking relating to the volume production and wider market issues. [5]
- Consideration of construction. [5]
- Consideration of specific materials and components (may include calculations.) [5]
- Consideration of dimensional detail (may include calculations). [3]
- Evaluation of the suitability of the ideas with reference to the Specification. [5]

[Total : 38]

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(b) Initial ideas (continued)

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R	
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(c) Features suitable for development.

- Appropriate features identified and clearly described. [4]
- Appropriate justification of the features identified with reference to the Specification. [4]

[Total : 8]

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J			
FD			

2524/02 PRODUCT DESIGN
2525/02 SYSTEMS AND CONTROL

CANDIDATE NAME _____

CANDIDATE NUMBER _____

CENTRE NUMBER _____