

Candidate Name	Centre Number	Candidate Number

WELSH JOINT EDUCATION COMMITTEE



CYD-BWYLLGOR ADDYSG CYMRU

ENTRY LEVEL CERTIFICATE

TYSTYSGRIF LEFEL MYNEDIAD

725/04

Entry Level Certificate

GRAPHICAL AND MATERIAL STUDIES

(Plastics)

P.M. THURSDAY, 23 March 2006

(½ Hour)

Examiner only

Total Marks	
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INSTRUCTIONS TO CANDIDATES

Write your name, centre number and candidate number in the spaces at the top of this page.

Answer **all** questions.

Underline **or** circle the correct answer **or** sketch **or** write in the spaces provided in this booklet.

If you have difficulty in reading a question, put up your hand and the teacher-in-charge will read it to you.

INFORMATION FOR CANDIDATES

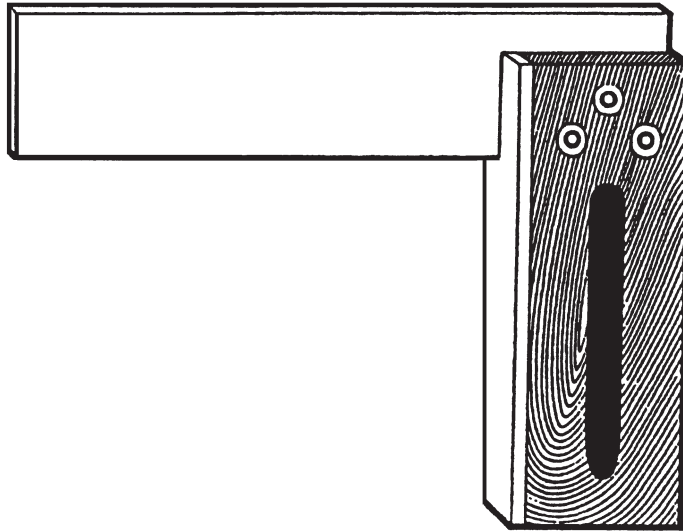
Each question carries **five** marks.

No certificate will be awarded to a candidate detected in any unfair practice during the examination.

Answer **all** questions.

Underline **or** circle *the correct answer or* sketch **or** write *in the spaces provided*.

1. The tool shown below is used in the Design and Technology room.



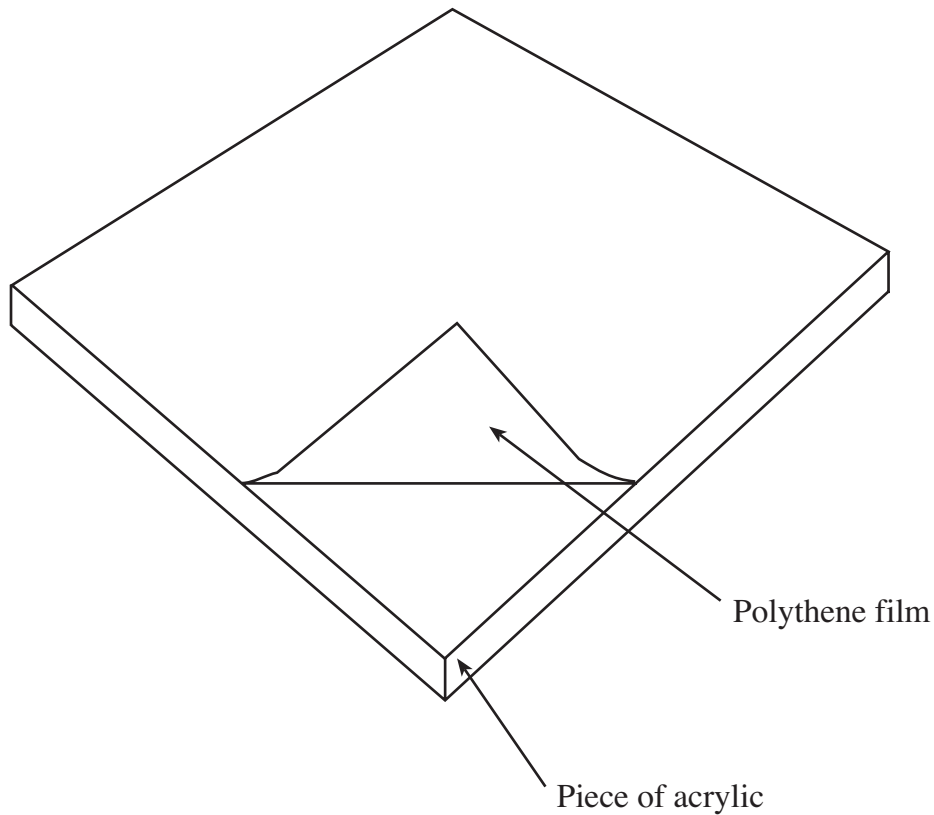
The tool shown is **one** (1) of the following:

- (a) Sliding bevel;
- (b) Tee square;
- (c) Try square;
- (d) Mitre square.

Underline the correct answer.

[5]

2. The sketch below shows a piece of acrylic which has a polythene film on its surface.



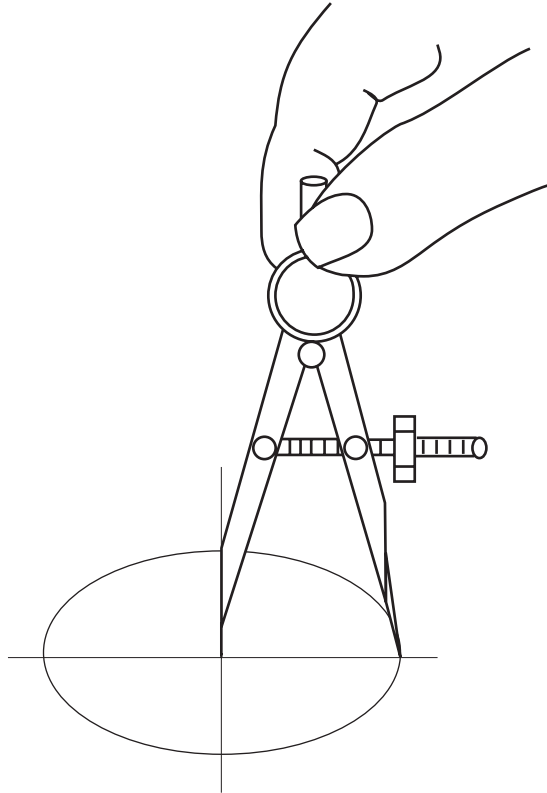
The polythene film on the surface is for **one** (1) of the following:

- (a) To protect the surface from scratches;
- (b) To add colour to the sheet;
- (c) To hide a mistake in the manufacturing process;
- (d) To keep the edge square.

Underline the correct answer.

[5]

3. This question is about marking out a circle on a piece of acrylic.



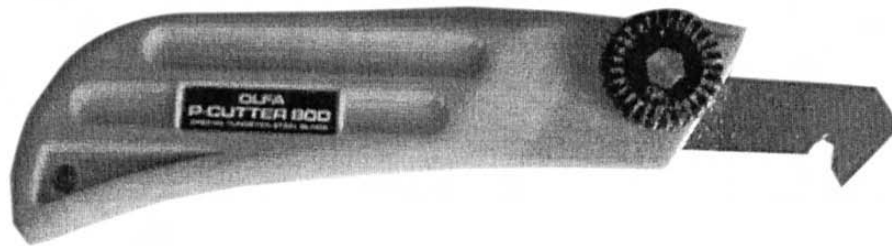
The tool being used is **one** (1) of the following:

- (a) Odd-leg callipers;
- (b) Compass;
- (c) Scriber;
- (d) Engineer's dividers.

Underline the correct answer.

[5]

4. The tool shown below is used for cutting straight lines in thin plastic sheet.



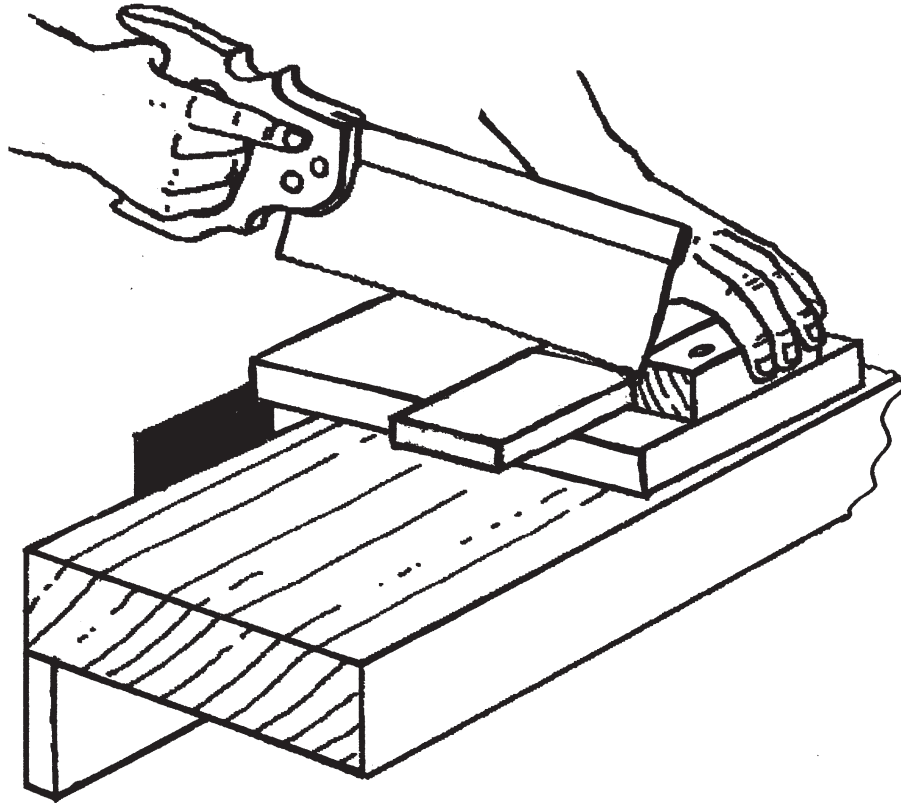
The tool shown is **one** (1) of the following:

- (a) Scoring tool;
- (b) Marking knife;
- (c) Cutting knife;
- (d) Scissors.

Underline the correct answer.

[5]

5. The sketch below shows a saw being used to cut a piece of plastic.



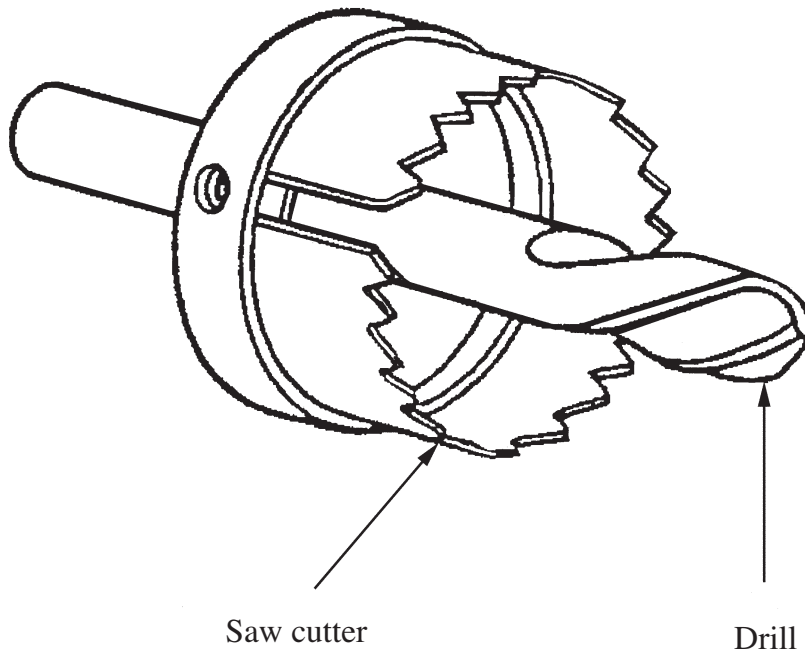
The saw being used is **one** (1) of the following:

- (a) Coping saw;
- (b) Hand saw;
- (c) Tenon saw;
- (d) Hole saw.

Underline the correct answer.

[5]

6. The tool shown below is used to cut large diameter holes in plastic.



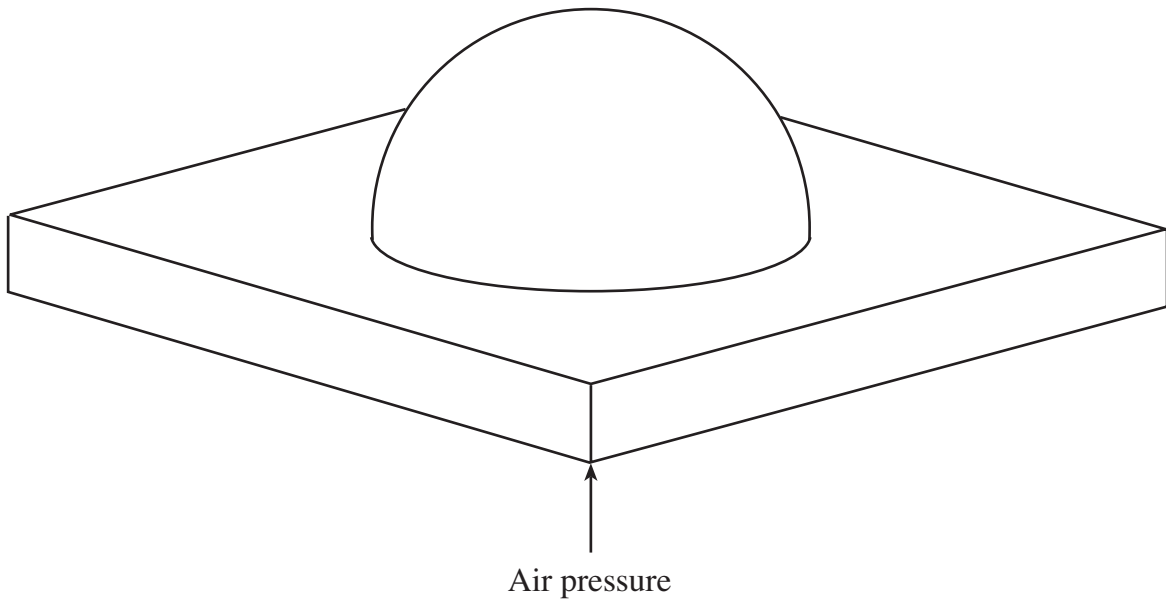
The tool shown is **one** (1) of the following:

- (a) Coping saw;
- (b) Hand saw;
- (c) Tenon saw;
- (d) Hole saw.

Underline the correct answer.

[5]

7. The sketch below shows a bubble made by forcing air against a heated surface.



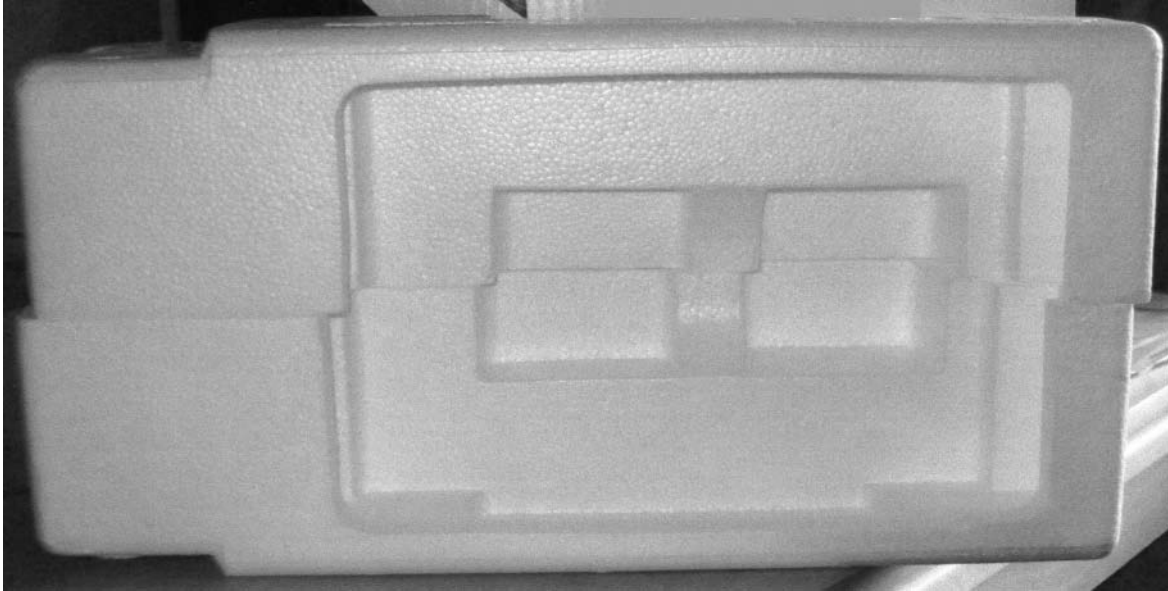
The bubble was made by **one** (1) of the following:

- (a) Line bending;
- (b) Blow moulding;
- (c) Vacuum forming;
- (d) Injection moulding.

Underline the correct answer.

[5]

8. The picture below shows a piece of packaging material from a box containing a computer monitor.



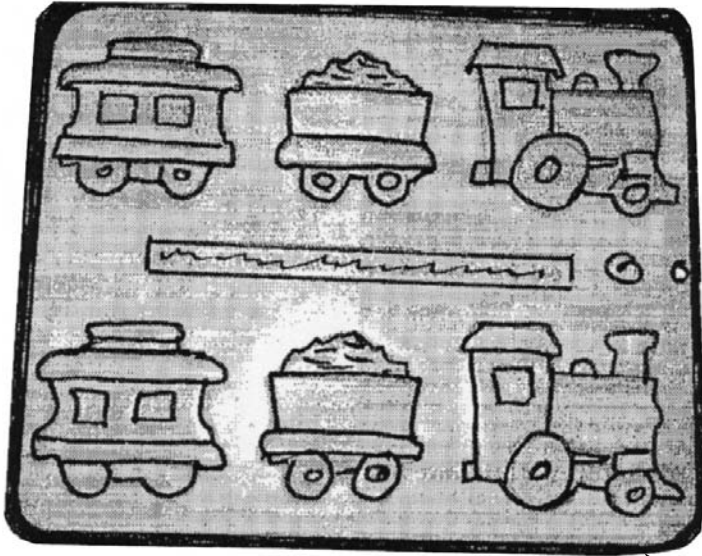
The packaging material is made from **one** (1) of the following materials:

- (a) Polythene;
- (b) Acrylic;
- (c) Expanded polystyrene;
- (d) Fibre glass.

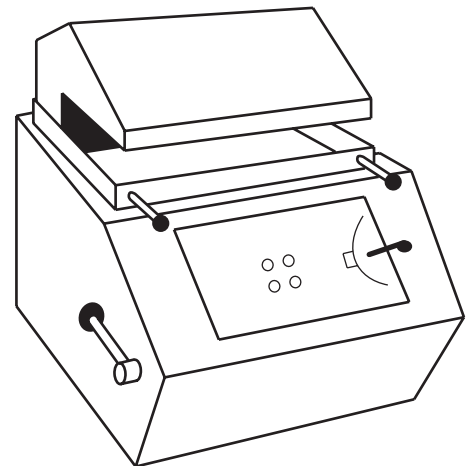
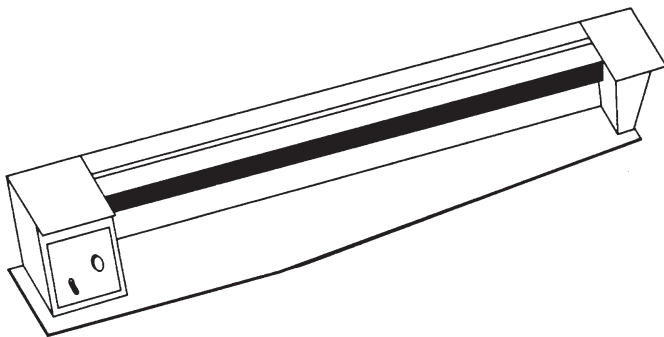
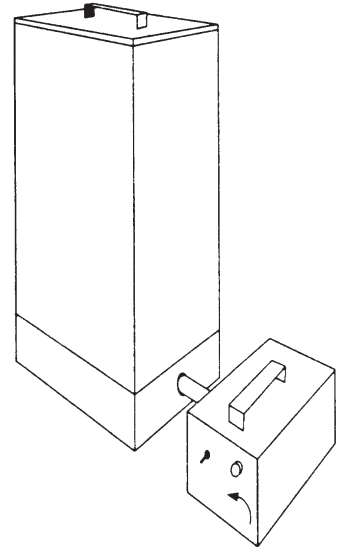
Underline the correct answer.

[5]

9. The sketches below show a mould for chocolates and some machines used to manufacture plastic items.



mould for chocolates



Circle the machine you would use to make the mould for chocolates.

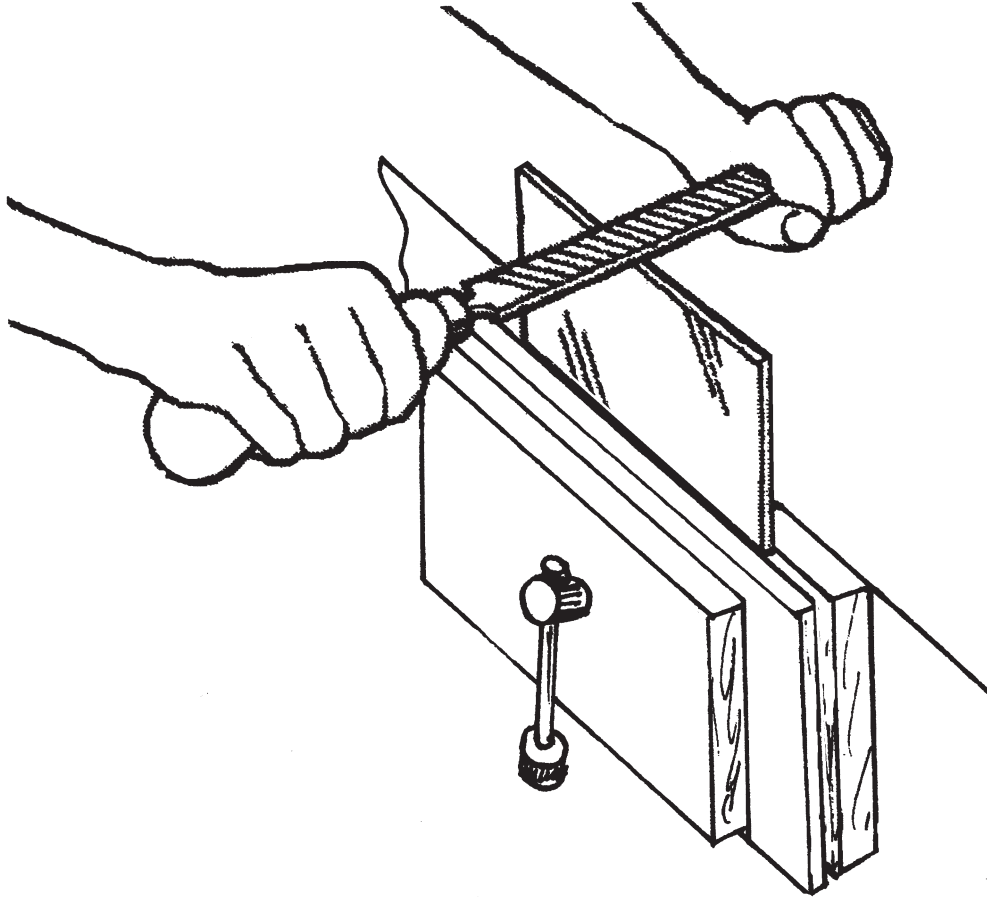
[2]

Write the name of the machine on the line below.

[3]

This machine is called a

10. The sketch below shows the edge of a piece of plastic being cleaned up.



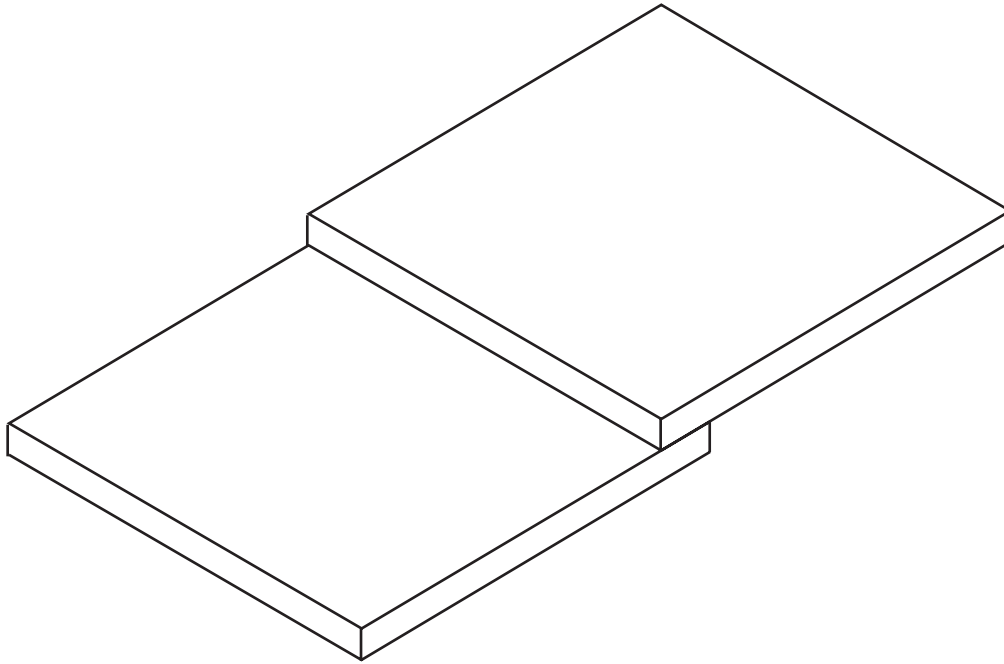
The cleaning up process is **one** (1) of the following:

- (a) Cross filing;
- (b) Scraping;
- (c) Draw filing;
- (d) Sanding.

Underline the correct answer.

[5]

11. The sketch below shows a lap joint used to join two pieces of thin plastic sheet. The joint needs to be taken apart at a later date.



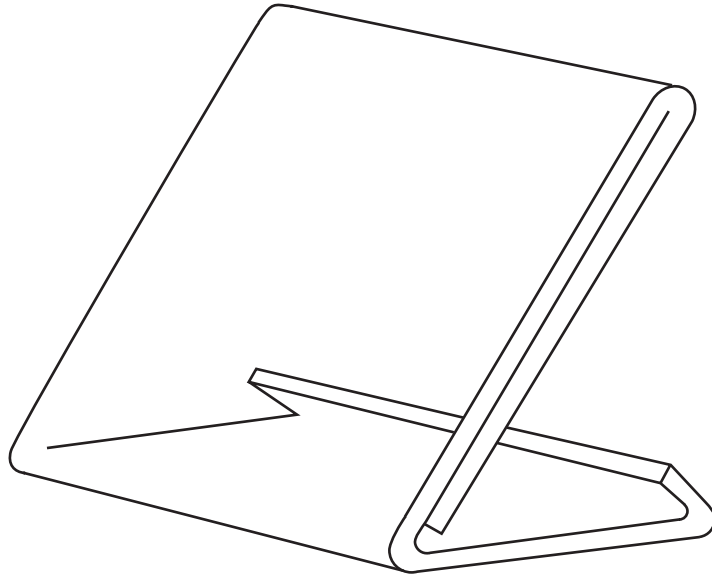
The lap joint has been joined by **one** (1) of the following:

- (a) PVA;
- (b) Tensol cement;
- (c) Double sided tape;
- (d) Araldite.

Underline the correct answer.

[5]

12. The sketch below shows a small photo frame made from clear acrylic.



The method (way) of making the photo frame is **one** (1) of the following:

- (a) Vacuum forming;
- (b) Blow moulding;
- (c) Line bending;
- (d) Extruding.

Underline the correct answer.

[5]

13. One of the **two** (2) main forms of plastic has a memory and tries to return to its original shape when reheated.

This type of plastic is called **one** (1) of the following:

- (a) Thermosetting;
- (b) Flexible plastic;
- (c) Thermoplastic;
- (d) Reshape plastic.

Underline the correct answer.

[5]

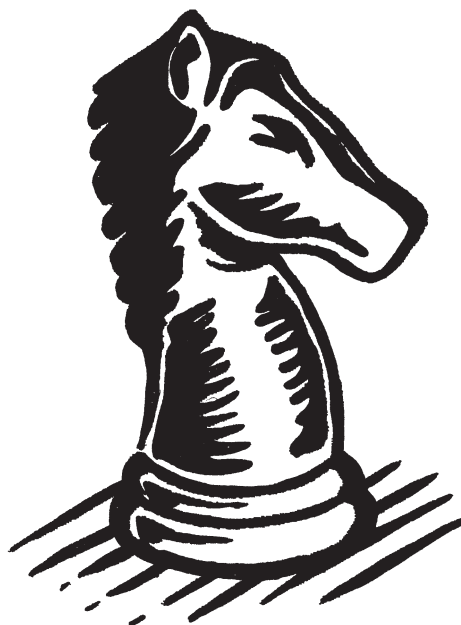
14. Melamine formaldehyde is mainly used to produce **one** (1) of the following.

- (a) Small boat;
- (b) Kitchen worktop;
- (c) Footballs;
- (d) Swimming floats.

Underline the correct answer.

[5]

15. The sketch below shows a chess piece made in the Design and Technology room from thermosetting plastic.



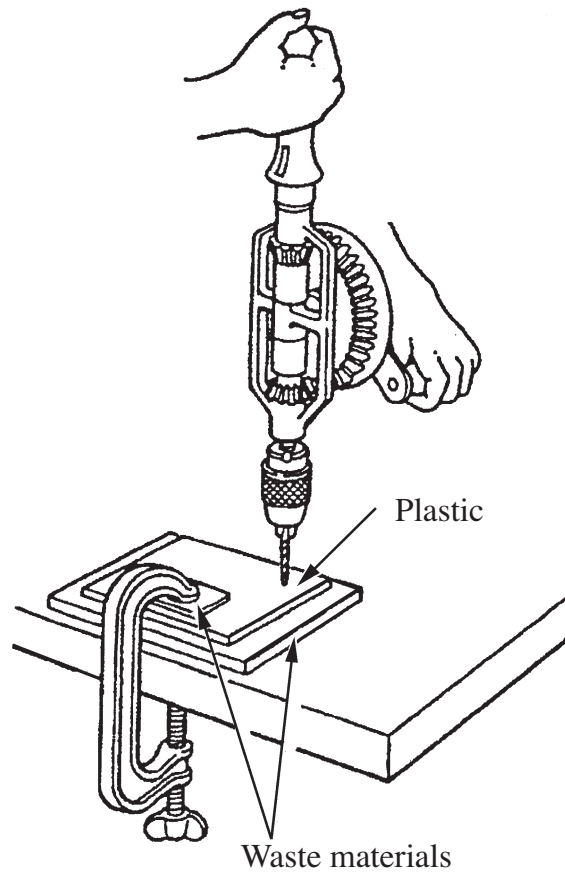
The method (way) of making the chess piece is called **one** (1) of the following:

- (a) Vacuum forming;
- (b) Resin casting;
- (c) Extruding;
- (d) Blow moulding.

Underline the correct answer.

[5]

16. This question is about drilling holes in plastic sheet.



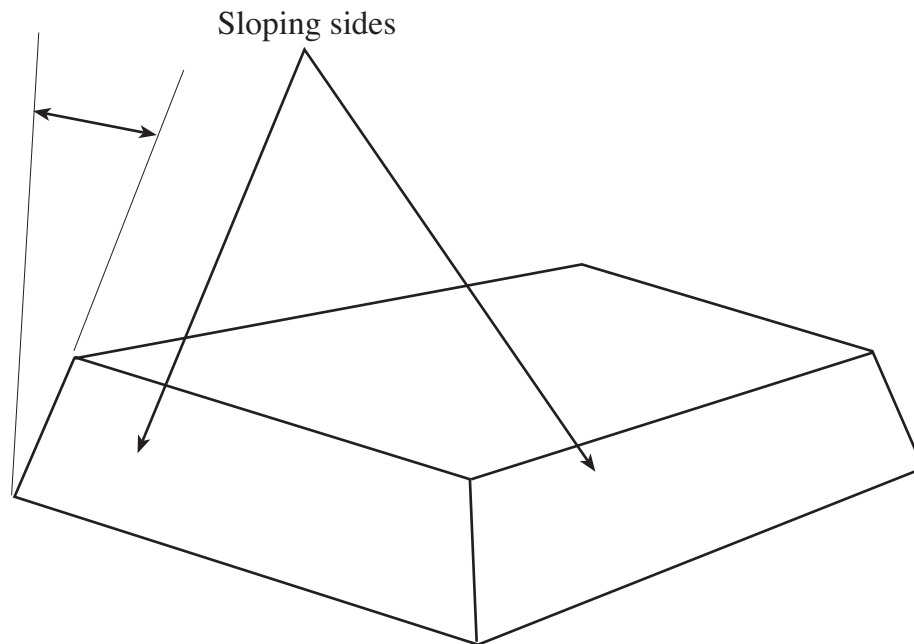
The tool being used to drill the hole in the plastic sheet is called **one** (1) of the following:

- (a) Electric drill;
- (b) Hand drill;
- (c) Pillar drill;
- (d) Driller.

Underline the correct answer.

[5]

17. The sketch below shows a mould suitable for use in the vacuum forming machine. The mould has sloping sides.



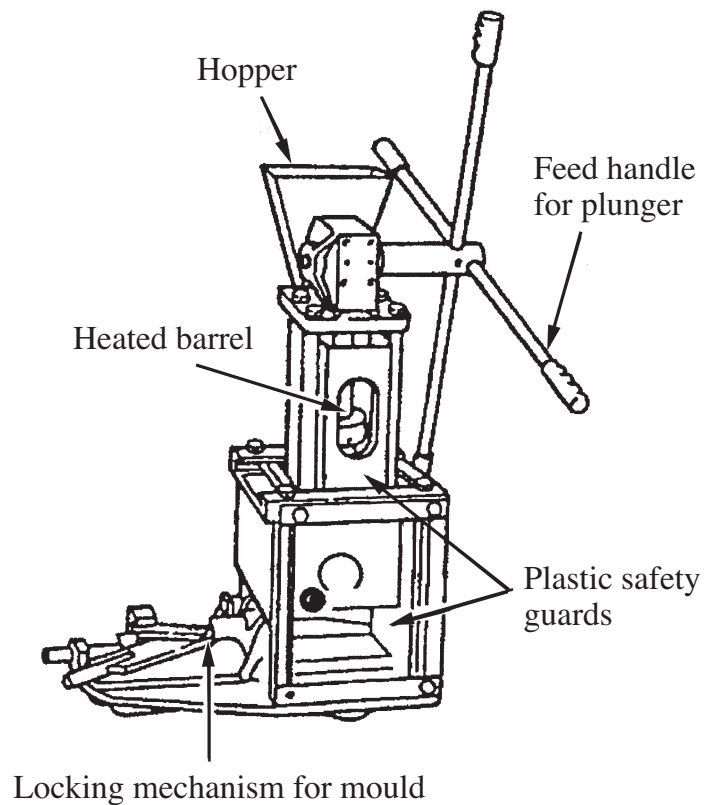
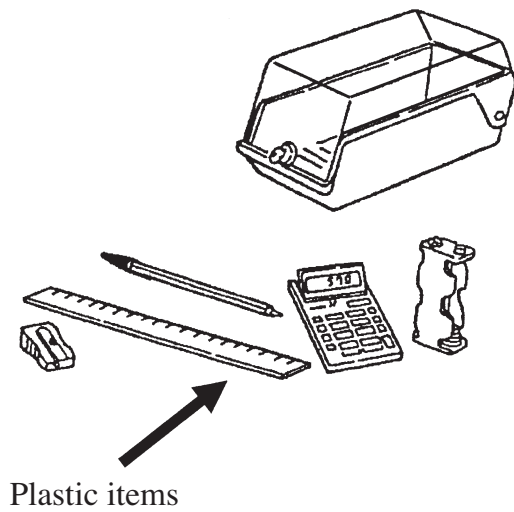
The sloping sides are called **one** (1) of the following:

- (a) Draft or taper;
- (b) Slopes;
- (c) Angled sides;
- (d) Sanded edges.

Underline the correct answer.

[5]

18. The sketches below show a selection of plastic items and a machine used to make them.



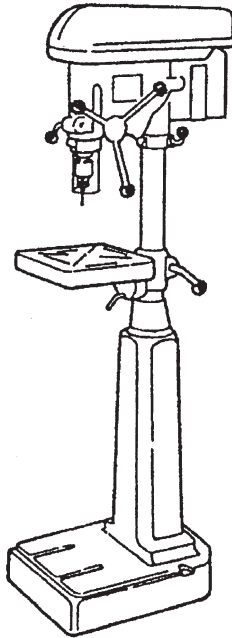
This machine is called **one** (1) of the following:

- (a) Plastic moulding machine;
- (b) Injection moulding machine;
- (c) Vacuum forming machine;
- (d) Extrusion machine.

Underline the correct answer.

[5]

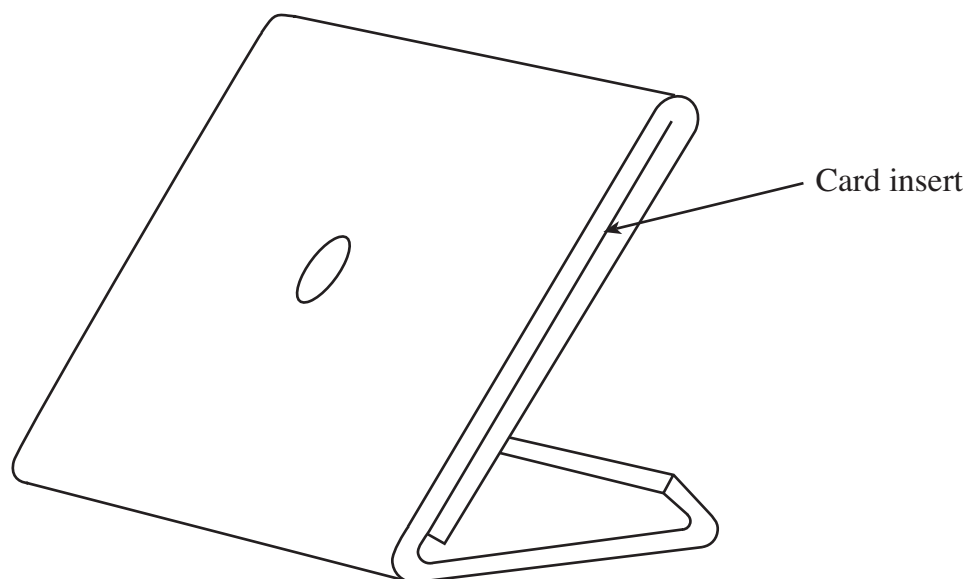
19. This question is about safety in the Design and Technology room. The sketch below shows a Pillar Drill.



In the space below, **write** down **five** (5) safety rules you should take when drilling plastic. [5]

- (i)
-
- (ii)
-
- (iii)
-
- (iv)
-
- (v)
-

20. The sketch below shows a simple clock design.



(a) **Name** a suitable plastic material for making the clock. **Complete** the sentence below.

I would use to make the clock. [1]

(b) In the space below, draw a suitable colourful design for the card insert which will form the face of the clock. The design should show your favourite sport. [4]

