

Candidate Name	Centre Number	Candidate Number
		4



## Entry Level

725/04

## GRAPHICAL AND MATERIAL STUDIES (Plastics)

P.M. THURSDAY, 13 March 2008

$\frac{1}{2}$  Hour

**Examiner only**

<b>Total Marks</b>	
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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 the correct answer **or** write in the spaces provided.

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

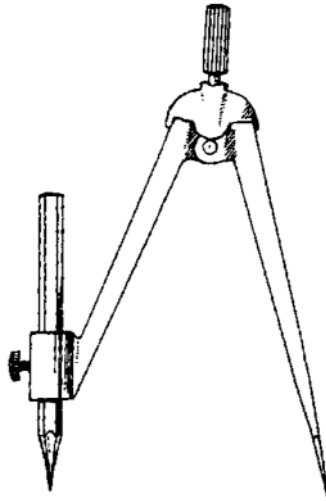
### INFORMATION FOR CANDIDATES

**Each** question carries **five** marks.

Answer **all** questions.

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

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



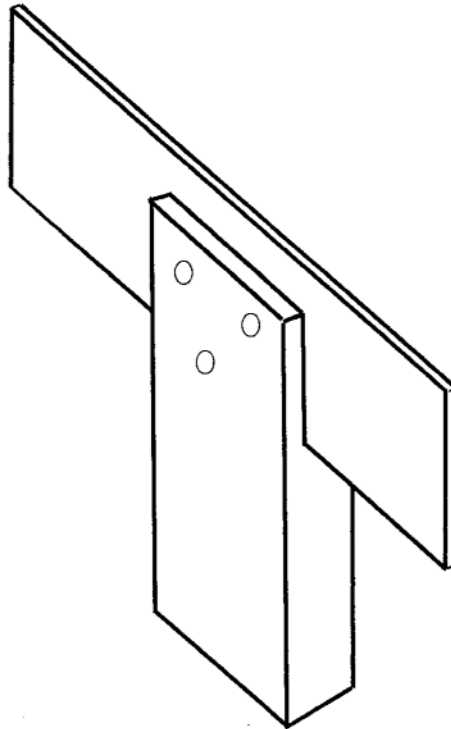
The tool shown is **one** (1) of the following:

- (a) Compass;
- (b) Dividers;
- (c) Scribe;
- (d) Circle marker.

**Underline** the correct answer.

[5]

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



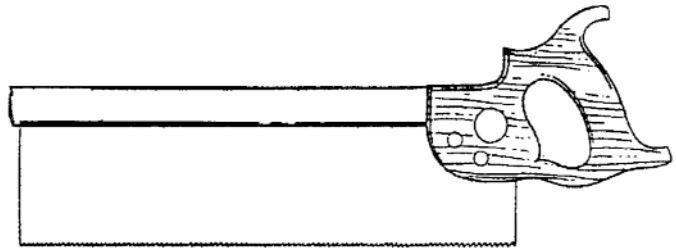
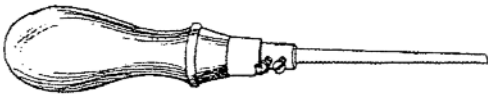
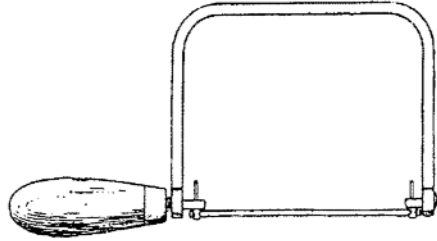
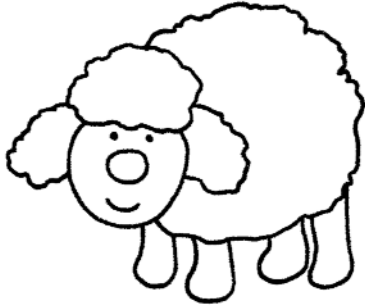
The tool shown above is **one** (1) of the following:

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

**Underline** the correct answer.

[5]

3. The sketches below show a shape which is to be cut out of acrylic and **three** (3) types of saw.



(a) **Circle** the type of saw you would use to cut out the acrylic shape. [3]

(b) **Write** the name of the saw on the line below.

The saw is called a ..... [2]

4. The tools shown below are used for marking out projects in Design and Technology.



- (a) **Circle** the type of marking out tool you would use to mark out acrylic before bending it on a strip heater. [3]

- (b) **Write** the name of the marking out tool on the line below.

The marking out tool is called a ..... [2]

5. The sketch below shows the first coat being applied to a GRP mould.



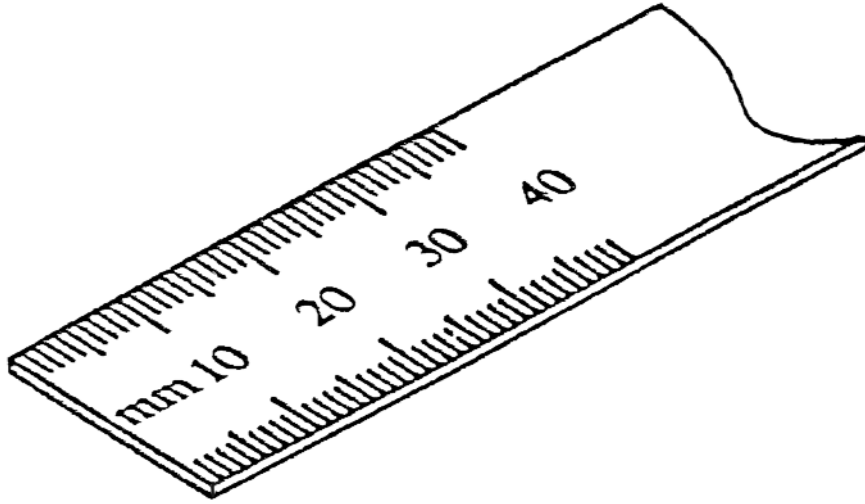
This first coat is called **one** (1) of the following:

- (a) Colour coat;
- (b) Parting agent;
- (c) Gel coat;
- (d) Lay up resin.

**Underline** the correct answer.

[5]

6. The sketch below shows the end of a steel rule.



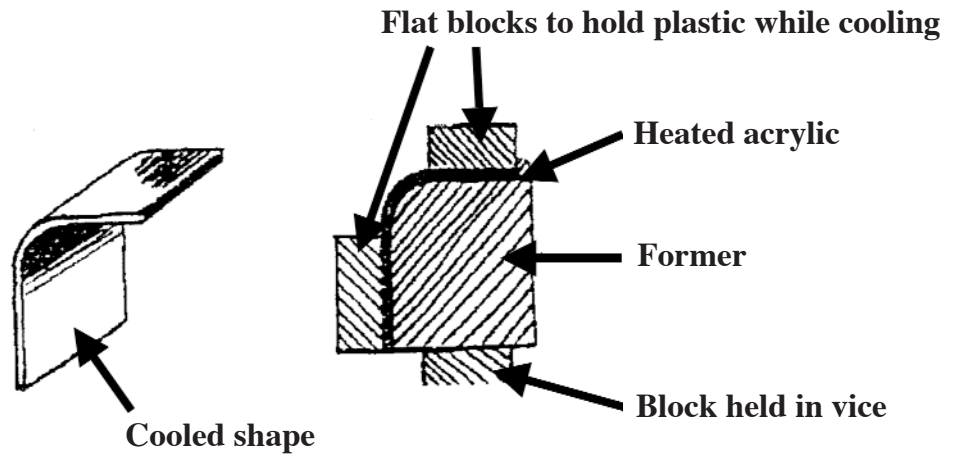
The measurements start from the end for **one** (1) of the following reasons:

- (a) To allow measurement to be made from inside a corner;
- (b) The rule was incorrectly made;
- (c) It is only a short rule;
- (d) The end has been broken.

**Underline** the correct answer.

[5]

7. The sketches below show a small piece of acrylic which has been heated to form a large bend and the final cooled shape.



The correct method of heating the acrylic before it is formed is **one** (1) of the following:

- (a) Using an oven;
- (b) Using a strip heater;
- (c) Using a line bender;
- (d) Using a hot air gun.

**Underline** the correct answer.

[5]



8. The sketch below shows a young girl with an umbrella.



The covering of the umbrella is made from **one** (1) of the following:

- (a) GRP;
- (b) Acrylic;
- (c) PVC;
- (d) Polystyrene.

**Underline** the correct answer.

[5]

9. The photograph below shows an egg box.



The egg box was made by **one** (1) of the following methods:

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

**Underline** the correct answer.

[5]

**10.** Many modern adhesives (glues) and emulsion paints are made from a type of plastic.

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

- (a) GRP (Glass reinforced plastic);
- (b) PVA (Poly vinyl acetate);
- (c) PVC (Poly vinyl chloride);
- (d) Polyester resin.

**Underline** the correct answer.

[5]

**11.** A plastic material can be used for packaging.

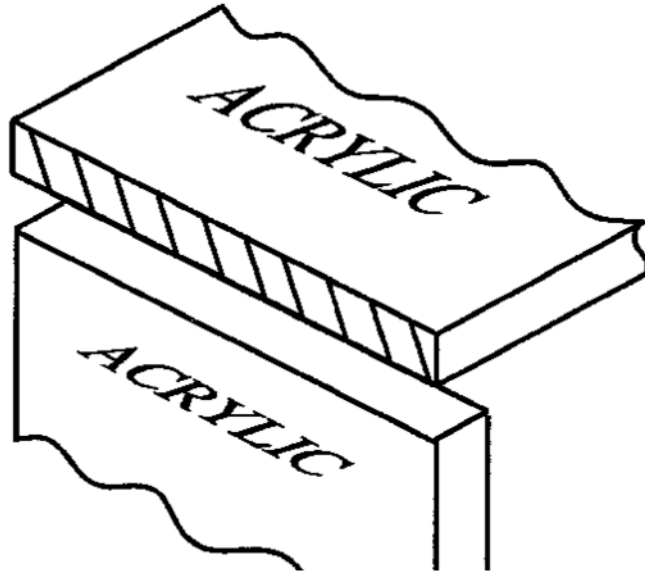
This type of plastic is called **one** (1) of the following:

- (a) Acrylic;
- (b) GRP (Glass reinforced plastic);
- (c) Expanded polystyrene;
- (d) Nylon.

**Underline** the correct answer.

[5]

12. The sketch below shows **two** (2) pieces of acrylic which are to be joined together.



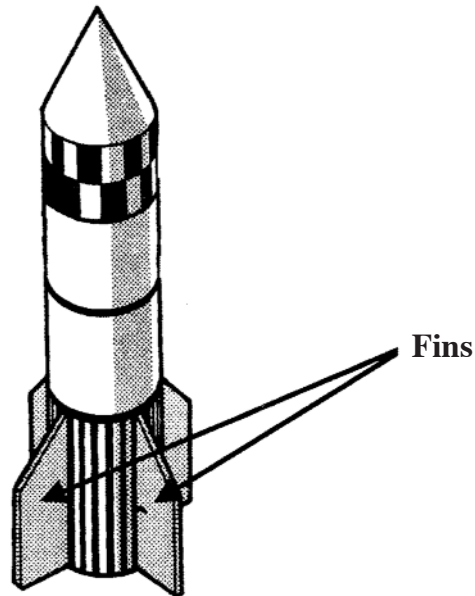
The type of joint is **one** (1) of the following:

- (a) Flush joint;
- (b) Butt joint;
- (c) Corner joint;
- (d) Rebated joint.

**Underline** the correct answer.

[5]

13. The sketch below shows a toy rocket made in Design and Technology.



(a) Name the machine tool that you could use to make the point on the rocket.

**Complete** the sentence below.

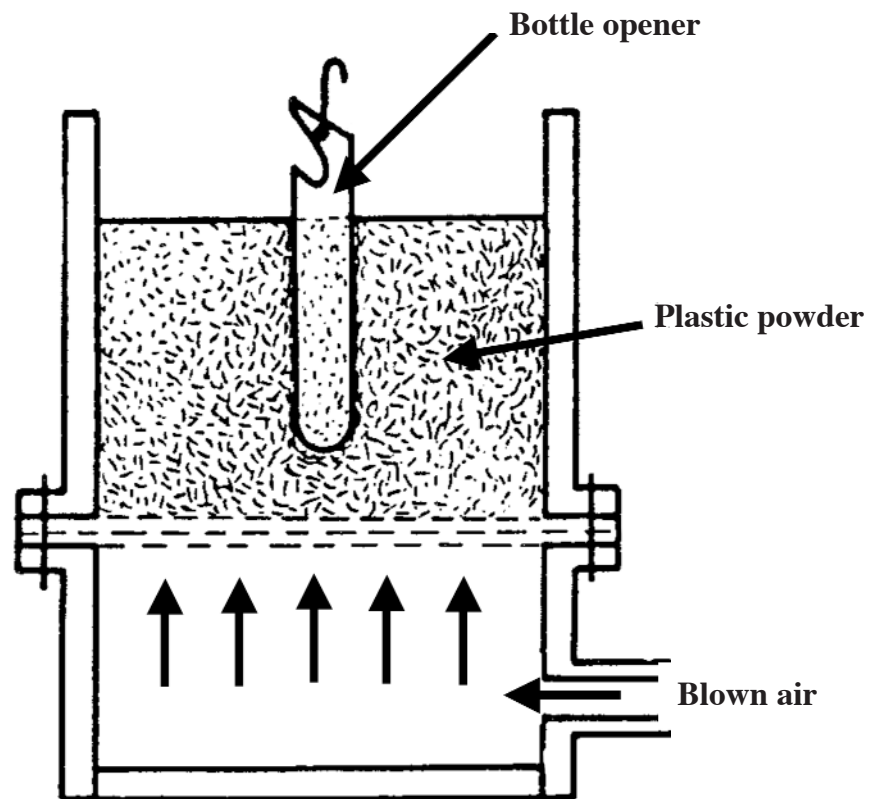
I would use a ..... to make the point on the rocket. [3]

(b) Name a suitable plastic material for making the fins.

**Complete** the sentence below.

I would use ..... to make the fins of the rocket. [2]

14. The sketch below shows a metal bottle opener being coated with plastic.



The method of coating the metal is called **one** (1) of the following:

- (a) Blow moulding;
- (b) Dip coating;
- (c) Plastic dipping;
- (d) Metal protecting.

**Underline** the correct answer.

[5]

15. The sketches below show items used in the Design and Technology room.

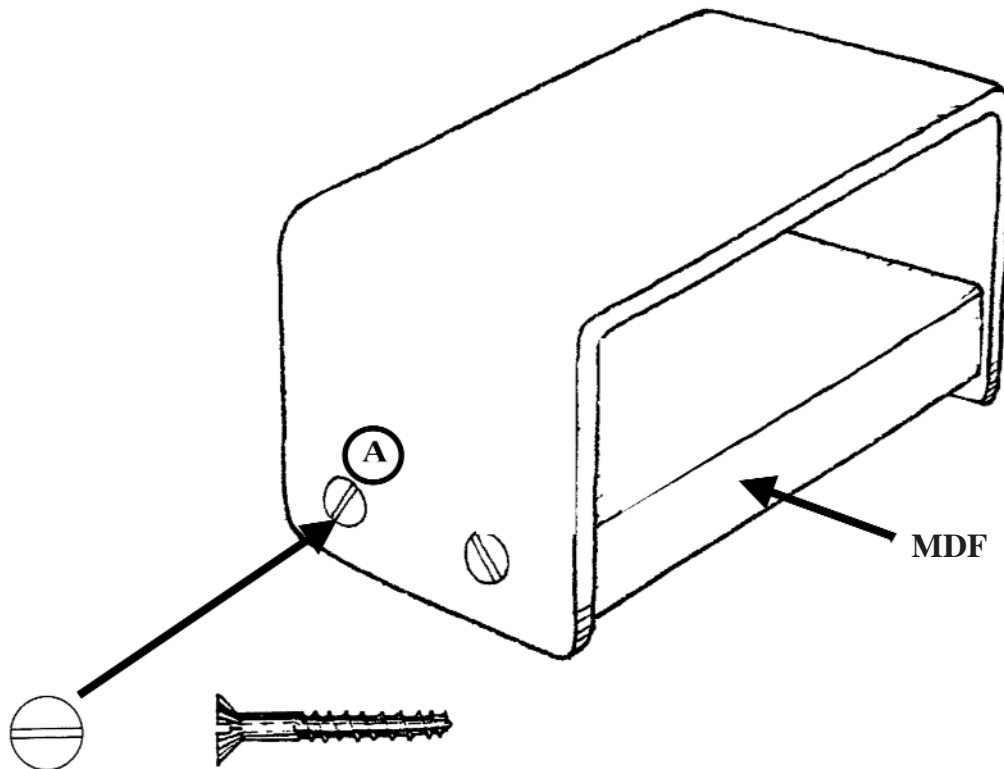


(a) Circle **one** (1) item you would use to smooth the edge of a piece of plastic material. [3]

(b) **Write** the name on the line below. [2]

.....

16. The sketches below show a small stand made from MDF and plastic and one of the screws used to put it together.



This screwdriver which will fit the screwhead (A) is **one** (1) of the following:

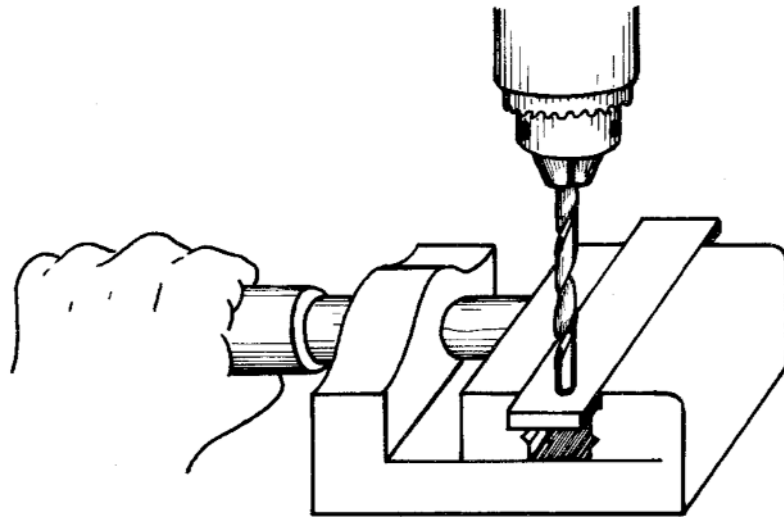
- (a) Phillips screwdriver;
- (b) Slotted screwdriver;
- (c) Pozidrive screwdriver;
- (d) Cross head screwdriver.

**Underline** the correct answer.

[5]



17. The sketch below shows a strip of plastic being drilled.



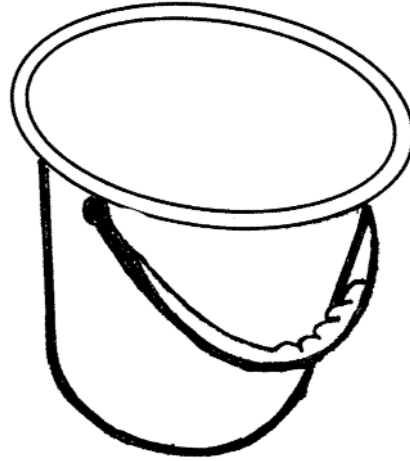
The strip of plastic is being held in **one** (1) of the following:

- (a) Metalwork vice;
- (b) Hand vice;
- (c) Machine vice;
- (d) Plastic clamp.

**Underline** the correct answer.

[5]

18. The sketch below shows a bucket.



The bucket is made from **one** (1) of the following plastics:

- (a) Rigid PVC;
- (b) High density Polythene;
- (c) Expanded polystyrene;
- (d) Melamine formaldehyde.

**Underline** the correct answer.

[5]

19. The sign shown below is for a door leading into the Design and Technology workshop. It is made of clear plastic and has coloured self adhesive plastic letters.

# Design and Technology

- (a) **Name** a suitable clear plastic material for the sign.

**Write** in the space below.

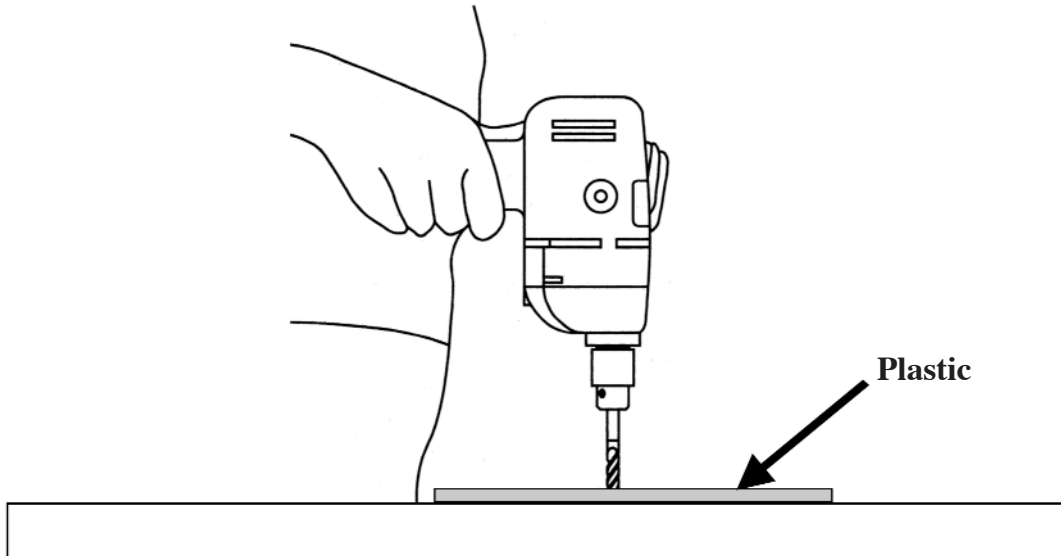
I would use ..... to make the sign. [3]

- (b) **Name** a method of making the coloured letters.

**Write** in the space below.

I would make the letters by ..... [2]

20. The sketch below shows an electric drill being used to drill a piece of plastic.



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

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