

Moulding and Joining

1 Glue is used to bond materials together. For example, joints can be secured or reinforced with glue.

a) Give **one** example of a type of glue that could be used to bond pieces of card together.

.....
[1 mark]

b) Give **one** advantage and **one** disadvantage of using superglue to bond materials.

Advantage:

Disadvantage:

[2 marks]

2 **Figure 1** shows a plastic box that is made using injection moulding.

Use sketches and/or notes to explain the process of injection moulding.



Figure 1

Large empty rectangular box for student response.

[4 marks]

3 Soldering, brazing and welding are three methods of joining metals together.

a) Describe the process of soldering. Give the name of any tools used in the process.

.....
.....
[2 marks]

b) i) Brazing is a higher temperature process than soldering.
State a joining material that can be used in the brazing process.

.....
[1 mark]

ii) Give **one** advantage of using brazing to join metals instead of soldering.

.....
[1 mark]

- 5 A design for a curved, plastic lamp shade is shown in **Figure 3**. The shade is made of a single sheet of plastic.

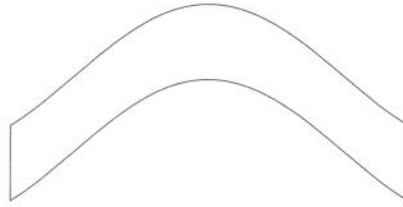


Figure 3

- a) Name a method that could be used to form the lamp shade shown in **Figure 3**.

Method: [1 mark]

- b) Use sketches and/or notes to give a detailed description of how the method you named in part a) could be used to form the lamp shade in **Figure 3**.

[3 marks]

- c) Decoration is to be added to the lamp shade to make the design less plain. The designer plans to do this by attaching small pieces of plastic to the outside of the shade. Suggest how these decorative shapes could be attached to the lamp shade without the need to use high temperatures.

.....
 [1 mark]

Score: / 24

