

**1** Make estimates of the following quantities.

**(a)** the thickness of a sheet of paper

thickness = ..... mm [1]

**(b)** the time for sound to travel 100 m in air

time = ..... s [1]

**(c)** the weight of  $1000\text{ cm}^3$  of water

weight = ..... N [1]

**2** Briefly describe the structures of crystalline solids, polymers and amorphous materials.

crystalline solids .....

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polymers .....

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amorphous materials .....

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[5]