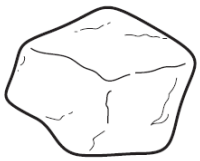
Physical Quantities – 2021 IGCSE 0625

1. June/2021/Paper_11&21/No.1

The diagram shows a stone of irregular shape.



Which property of the stone can be found by lowering it into a measuring cylinder half-filled with water?

A length

B mass

C volume

D weight

2. June/2021/Paper_12&22/No.1

Which piece of apparatus is the most suitable for measuring the mass of a pencil sharpener?

A digital balance

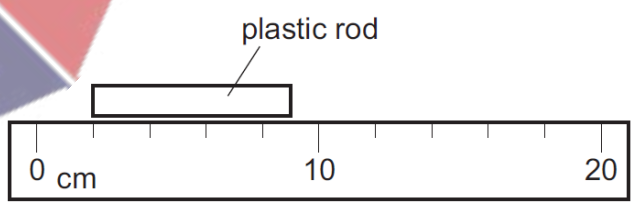
B measuring cylinder

C newton meter

D ruler

3. June/2021/Paper_13&23/No.1

The diagram shows a plastic rod alongside a ruler.



What is the length of the rod?

A 2.5 cm **B** 3.5 cm **C** 7.0 cm **D** 9.0 cm

4. March/2021/Paper_12&22/No.1

A student has a measuring cylinder containing water and also has a balance.

Which of these could she use to find the volume of a small metal sphere?

She has no other apparatus.

A either the measuring cylinder containing water or the balance

B the measuring cylinder containing water only

C the balance only

D neither the measuring cylinder nor the balance

5. June/2021/Paper_32/No.1

Fig. 1.1 shows the core of a transformer. It is made from thin sheets of iron.

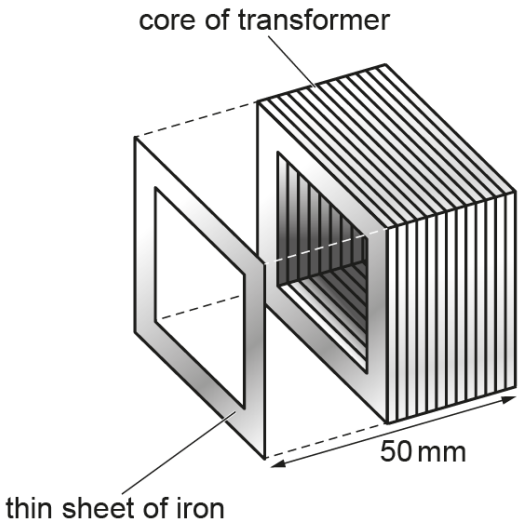


Fig. 1.1 (not to scale)

(a) There are 200 sheets of iron in the core of the transformer. The thickness of the core is 50 mm.

Calculate the average thickness of **one** sheet of iron.

average thickness of one sheet = ... mm [3]

(b) The density of the iron in the core is 7.65 g / cm^3. The mass of the core is 1377 g.

Calculate the volume of the core.

volume = ... cm^3 [3]

(c) State the name of a device used to measure mass.

..... [1]

[Total: 7]