

Physical Quantities & Measurement Techniques

Question Paper

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| Course | CIE IGCSE Physics |
| Section | 1. Motion, Forces & Energy |
| Topic | Physical Quantities & Measurement Techniques |
| Difficulty | Easy |

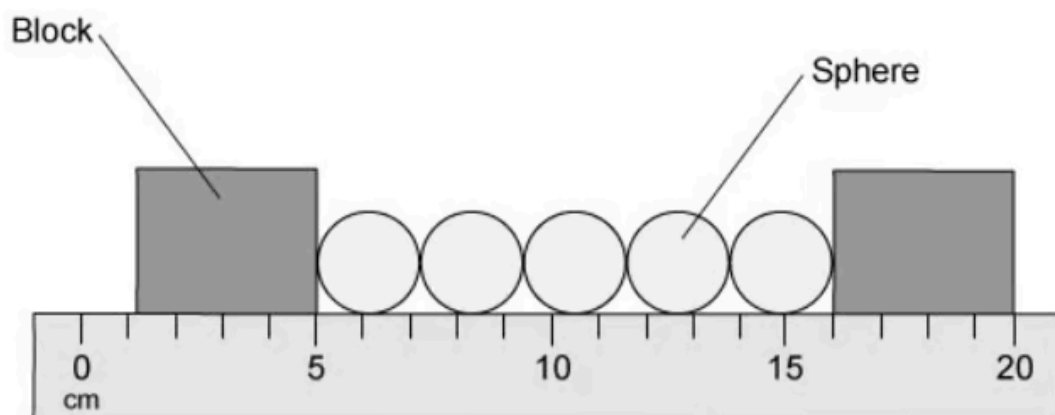
Time Allowed 10

Score /5

Percentage /100

Question 1

Five identical spheres are placed between two blocks in order to measure their diameter.



What is the diameter of a single sphere?

- A. 2.2 cm
- B. 2.0 cm
- C. 2.1 cm
- D. 2.3 cm

[1 mark]

Question 2

A student wants to take a particularly accurate measurement of the volume of liquid in a measuring cylinder.

Which of the following procedures would make her measurement **less** accurate?

- A. Putting her eyes level with the height of the measurement to be taken.
- B. Reading the liquid level from the bottom of the meniscus.
- C. Using the largest measuring cylinder she could find.
- D. Using a set-square to make sure the cylinder is perfectly vertical.

[1 mark]

Question 3

A student is timing the rate of cooling of a beaker of water. On a repeat run of the investigation, the student forgets to zero the stopwatch.

The readings on the stopwatch at the start time and the end time are shown in Fig. 1.1

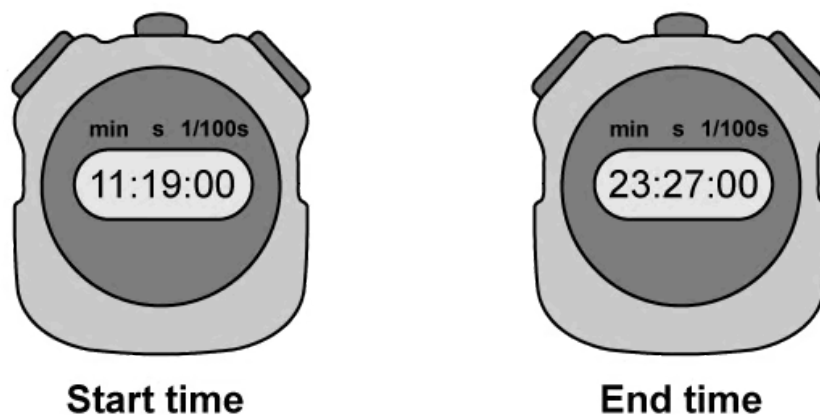


Fig. 1.1

Calculate how long it took the beaker to cool.

- A. 11 minutes
- B. 11 minutes and 8 seconds
- C. 12 minutes
- D. 12 minutes and 8 seconds

[1 mark]

Question 4**Extended tier only**

Identify the physical quantity that is **not** scalar.

- A. speed
- B. time
- C. weight
- D. energy

[1 mark]

Question 5**Extended tier only**

Identify the physical quantity that is a scalar.

- A. weight
- B. distance
- C. velocity
- D. acceleration

[1 mark]