

1. Nov/2023/Paper_0625/11/No.1

In order to determine the period of a pendulum, a student times one complete swing of the pendulum using an analogue stop-watch with a second hand.

Which change of method produces the greatest improvement in accuracy?

- A** asking a friend with a shorter reaction time to take the measurement
- B** measuring the time for 100 swings of the pendulum and dividing it by 100
- C** measuring the time for a half swing of the pendulum and doubling it
- D** using a digital timer

2. Nov/2023/Paper_0625/12/No.1

A student investigates the oscillation of a mass suspended from a spring.

The student pulls the mass down from its rest position P and then releases it so that it oscillates vertically.

The student then follows the instructions listed to find the period of the oscillating mass.

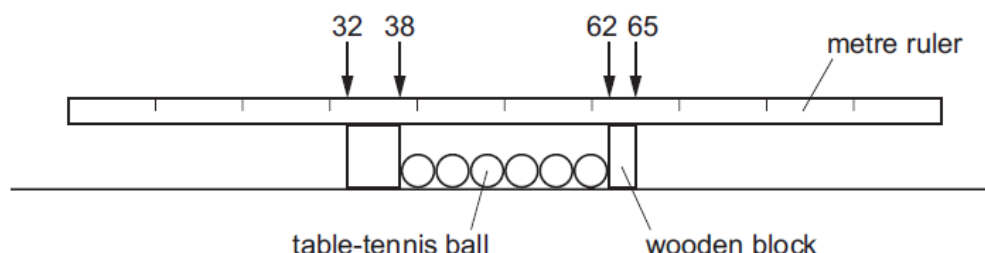
- 1 Count 10 complete oscillations.
- 2 Divide the time on the stop-watch by 10.
- 3 Start the stop-watch as the mass passes upwards through point P.
- 4 Stop the stop-watch.

What is the correct order of these instructions?

- A** 1 → 3 → 4 → 2
- B** 3 → 1 → 4 → 2
- C** 3 → 4 → 1 → 2
- D** 4 → 3 → 2 → 1

3. Nov/2023/Paper_0625/13/No.1

A student uses a metre ruler to measure the length of six identical table-tennis balls placed between two wooden blocks.



What is the diameter of one ball?

- A** 4 cm
- B** 5 cm
- C** 6 cm
- D** 8 cm

4. Nov/2023/Paper_0625/21/No.1

Which is a vector quantity?

- A density
- B mass
- C pressure
- D weight

5. Nov/2023/Paper_0625/22/No.1

Which quantity is a scalar quantity?

- A acceleration
- B force
- C time
- D velocity

6. Nov/2023/Paper_0625/23/No.1

How many of the quantities shown are scalars?

- mass momentum density energy
- A 1 B 2 C 3 D 4

7. June/2023/Paper_0625/11/No.1

Which unit is a unit of weight?

- A kilogram
- B kilojoule
- C kilometre
- D kilonewton

8. June/2023/Paper_0625/12/No.1

Which single apparatus is used to find the volume of a solid cube and which single apparatus is used to find the volume of a quantity of liquid?

	volume of solid cube	volume of liquid
A	balance	balance
B	balance	measuring cylinder
C	ruler	balance
D	ruler	measuring cylinder

9. June/2023/Paper_0625/13/No.1

Which piece of apparatus is used to measure the length of a copper rod of length approximately 2 cm?

- A digital timer
- B measuring cylinder
- C ruler
- D balance

10. June/2023/Paper_0625/32/No.1(a)

A student measures the diameter of some identical steel balls. Fig. 1.1 shows the arrangement she uses.

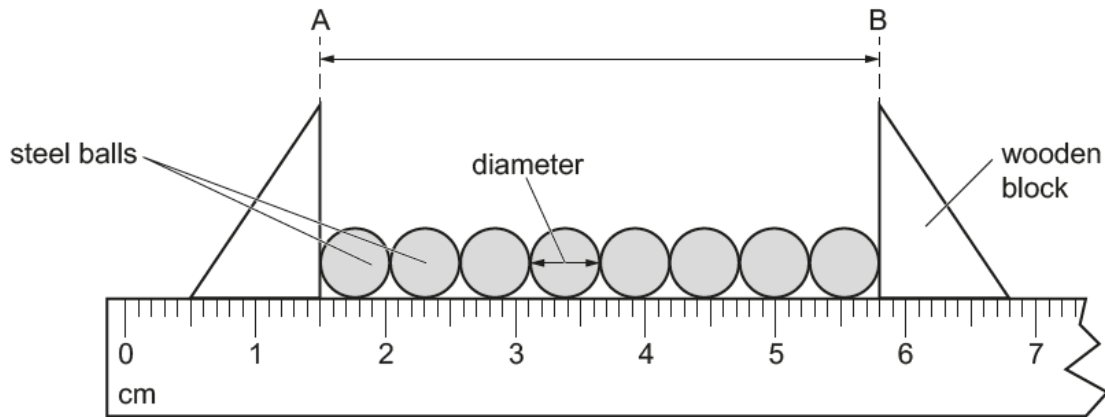


Fig. 1.1 (not to scale)

(a) (i) Using the ruler in Fig. 1.1, determine the distance AB on Fig. 1.1.

distance AB = cm [2]

(ii) Use the distance AB to determine the diameter of one steel ball.

diameter of one steel ball = cm [2]

