

Apparatus list

Question 1

- 1 x retort stand with boss
- 1 x cylindrical wooden rod
- 1 x plastic cup with 50 g slotted mass attached and string tied* (see notes)
- 1 x plastic cup with 100 g slotted mass attached and string tied* (see notes)
- 1 x measuring cylinder
- 1 x set square
- 1 x metre rule
- 1 x measuring jug containing water
- 1 x mass balance (share)
- paper towels to mop up any spillage
- 2 x beaker (to be used as holder for plastic cups only)

Notes

1. Make two holes just below the top of the plastic cup. The two holes should lie on a diameter across the cup as shown in Fig. 1.1.

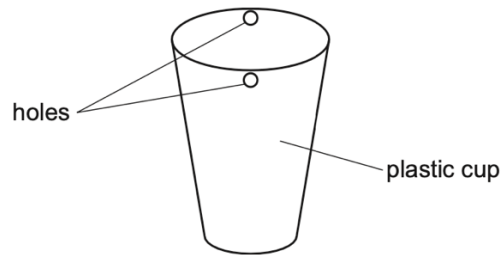


Fig. 1.1

Use tape to attach the 50 g slotted mass half-way between the holes on the outside of the cup with the slot at the top. The string should be passed through the holes and knots tied on the outside as shown in Fig. 1.2.

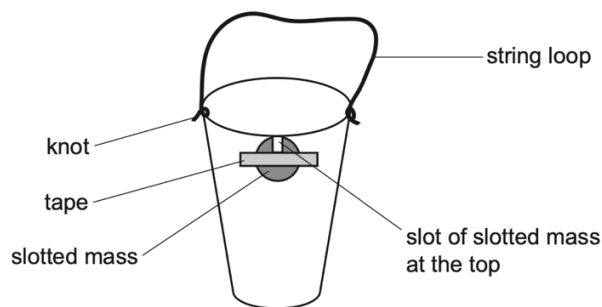


Fig. 1.2

2. The apparatus should be laid out on the bench. If the apparatus is to be used by another candidate, then it should be restored to its original state.

Apparatus list

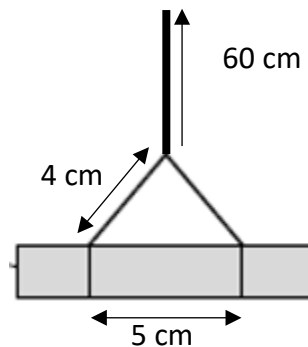
Question 2

- 1 x retort stand with boss and clamp (share with Question 3)
- 1 x plastic jug (to retrieve hot water from dispenser)
- 1 x measuring beaker (Note: Beaker with markings at 100 ml and 200 ml)
- 1 x plastic cup
- 1 x vernier caliper
- 1 x thermometer
- 1 x stopwatch (share with Question 3)
- hot water (Note: Set temperature of water dispenser to 80 °C)
- paper towels to mop up any spillages

Apparatus list

Question 3

- 1 x retort stand with boss and clamp (share with Question 2)
- 1 x bar magnet assembled with strings and tape
(Note: Follow approximate dimensions of string attached to magnet as shown below.
Tape should be securing the string to the magnet).



- 1 x bar magnet
- 1 x wooden cork
- 1 x half-metre rule
- 1 x 30-cm rule
- 1 x stopwatch (share with Question 2)
- blue tack