



2023 Sec 3 Physics Assignment 01 (Answers)

Physical Quantities & Measurements

Name: _____ () Class: 3/ ____ Date: _____

1. B

2. C

3. A $T = t/n$, $f = 1/T$

4. A $V = \text{change in } V$, $m = d \times V$

5. C $d = L / 20$

6.

- Size is not a measurable physical quantity. In the context of the basketball, size may refer to its mass, weight, volume, surface area, radius, diameter or circumference. Therefore, one of these terms should be used instead of “size”.
- Use a ruler to measure the diameter, then calculate radius, circumference or volume of basketball.
- OR Use a tape measure to measure its circumference.
- OR Use an electronic balance to measure its mass, calculate its weight.

7.

(a) e.g. 6.0 kg

The mass of the school bag can be determined by placing it on an electronic balance / hanging it from a spring balance.

(b) 31.0 °C

Use a temperature sensor or laboratory / room thermometer to measure every mid-day temperature of January. The average mid-day temperature for January is dividing the sum of all the mid-day temperatures taken (31 readings) by 31.

(c) 13 – 20 s.

Start the stopwatch when the observer sees the flash from the start pistol.
Stop the stopwatch when the observer sees the runner run past the finish line.