



## INDIAN SCHOOL AL BURAIMI

### Physics-Worksheet 02

Name:

Chapter 1: Units and Measurements

Date 28/04/2026

Class: XI A

- The sum of the numbers 436.32, 227.2, and 0.301 in appropriate significant figures is  
(a) 663.821 (b) 664 (c) 663.8 (d) 663.82 (NCERT EXEMPLAR)
- The mass and volume of a body are 4.237 g and 2.5 cm<sup>3</sup>, respectively. The density of the material of the body in correct significant figures is: (NCERT EXEMPLAR)  
(a) 1.6048 g/cm<sup>3</sup> (b) 1.69 g/cm<sup>3</sup> (c) 1.7 g/cm<sup>3</sup> (d) 1.695 g/cm<sup>3</sup>
- A planet moves around the sun in nearly circular orbit. Its period of revolution  $T$  depends upon (i) radius  $r$  of the orbit (ii) mass  $M$  of the sun (iii) the gravitational constant  $G$ . Show dimensionally that  $T^2 \propto r^3$ .
- The density of a liquid is 13.6 g cm<sup>-3</sup>. Its value in S.I unit is  
(a) 13.6 kgm<sup>-3</sup> (b) 136 kgm<sup>-3</sup> (c) 13600 kgm<sup>-3</sup> (d) 1360 kgm<sup>-3</sup>
- The length, breadth and thickness of a rectangular sheet of metal are 4.234 m, 1.005 m, and 2.01 cm respectively. Give the area and volume of the sheet to correct significant figures.
- The mass of a box measured by a grocer's balance is 2.30 kg. Two gold pieces of masses 20.15 g and 20.17 g are added to the box. What is (a) the total mass of the box (b) the difference in the masses of the pieces to correct significant figures.
- Give the number of significant figures for the following  
a) 2.00340 m (b) 508900 km (c) 1.0456780 g (d) 2005870 m<sup>2</sup>
- Check whether the following equation is dimensionally correct or not  
 $V^2 - u^2 = 2as$
- Which are the two supplementary quantities?
- Give an example for a quantity with no unit and no dimension.

