

Problem Set 1: Scientific Measurements Solutions

- 1) Define accuracy and precision.

- 2) Identify the measurements by the given SI unit.
 - a) g
 - b) cm
 - c) mL
 - d) L
 - e) m^3
 - f) mols
 - g) K
 - h) s
 - i) g/cm^3

- 3) To construct a cube that has a length of 10 cm each side, how many cubes measuring 1 cm each side would you require?

- 4) Two objects have different volumes, but identical masses. Therefore,
 - a) The object with the larger volume has the lower density.
 - b) Both objects have the same density.
 - c) The object with the larger volume has the higher density.
 - d) The object with the smaller volume has the lower density.

- 5) Write 1 meter using the SI prefixes centi, milli, and micro.