Name: Class: Mark:

1. Round the following measurements to the accuracy shown.

(a) The mass of a brass screw is 2.30 g. Give the mass to 1 decimal place. [1]

(b) The length of an aluminium pipe is 101.93 cm.
Give the length to 2 significant figures. [1]

(c) The surface area of the fabric on a trampoline is 2.566 m2.
Give the area to 3 s.f. [1]

(d) A 3D printed component requires 32.993 g of polylactic acid (PLA) to be printed.
Give this figure to 2 s.f. [1]

(e) A CNC machine head moves at a speed of 0.239 m/s. Give the speed to 1 d.p. [1]

(f) The mass of a metal bearing is 0.289 g. Give the mass to 2 d.p. [1]

2. This question looks at different flooring costs.

(a) A hallway in a flat requires a wooden floor of 9.00 m2. The engineered wood
which is to be laid on the floor costs £32.55 per m2.

 Work out the total cost of the flooring needed for the hallway.
Give your answer to 3 significant figures. [2]

(b) A builder is laying flooring in 100 identical flats. The total cost of the laminate flooring
is £34,521. Each flat requires 28.25 m2.

 Calculate the cost of the flooring for **one** m2.
Give your answer to the nearest penny. [3]

3. The Mars Curiosity Rover landed on Mars in 2012, designed to tour the surface of the planet collecting data.

(a) The distance from Earth to Mars is 5.46 × 107 km. Write this as a whole number. [1]

(b) Write this distance in metres. Give your answer in standard form. [1]

(c) Write this distance in centimetres. Give your answer in standard form. [1]

[Total 14 marks]