

15 A man of weight 600 N stands with both feet flat on the ground.

What is a reasonable estimate of the pressure exerted on the ground by the weight of the man?

- A** $1 \times 10^0 \text{ Pa}$ **B** $1 \times 10^2 \text{ Pa}$ **C** $1 \times 10^4 \text{ Pa}$ **D** $1 \times 10^6 \text{ Pa}$

9 A sphere moves vertically downwards at terminal (constant) velocity in a liquid.

Which statement about the magnitude of the upthrust acting on the sphere is correct?

- A** It is proportional to the acceleration of free fall.
B It is equal to the weight of the sphere.
C It is proportional to the density of the sphere.
D It is proportional to the square of the radius of the sphere.

13 What is the definition of density?

- A** mass of one cubic metre
B mass of a unit volume
C mass per cubic metre
D mass per unit volume

15 A measuring cylinder contains 80 cm^3 of a liquid.

The pressure due to the liquid at the 60 cm^3 mark is 1200 Pa.

What is the pressure due to the liquid at the base of the measuring cylinder?

- A** 1200 Pa **B** 1600 Pa **C** 3600 Pa **D** 4800 Pa