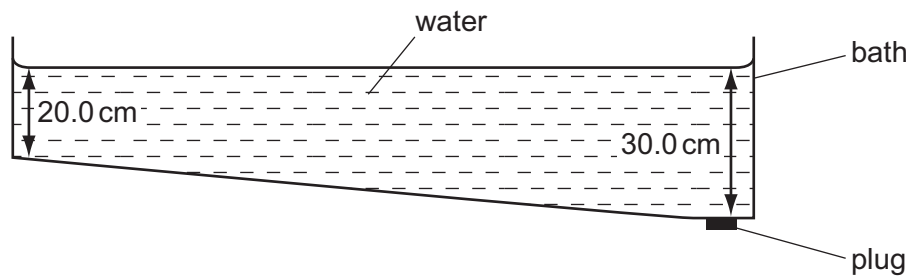


- 22** Water in a bath varies in depth from 20.0 cm at the shallow end to 30.0 cm at the end with the plug.



The density of the water is  $1000 \text{ kg m}^{-3}$ .

What is the pressure of the water acting on the plug?

- A** 1960 Pa      **B** 2450 Pa      **C** 2940 Pa      **D** 4900 Pa
- 23** Which properties best describe modelling clay?
- A** brittle and ductile  
**B** ductile and elastic  
**C** elastic and plastic  
**D** plastic and ductile
- 24** A steel spring has a spring constant of  $150 \text{ N m}^{-1}$ . When a 25 N weight is hung from the spring, it has a stretched length of 55 cm.

What was the original length of the spring?

- A** 0.38 m      **B** 0.49 m      **C** 0.61 m      **D** 0.72 m

**Space for working**