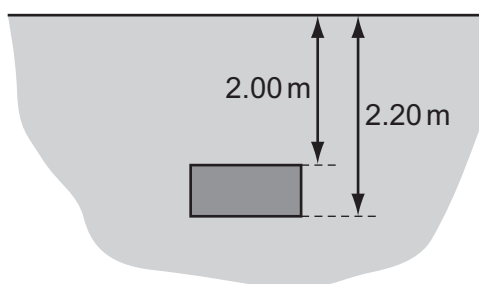


- 22 Which row correctly describes the ordering and motion of the molecules in water and in ice when both are at a temperature of  $0^{\circ}\text{C}$ ?

	ordering	motion
<b>A</b>	a regular pattern of molecules in ice but not in water	molecules in both ice and water have the same average speed
<b>B</b>	a regular pattern of molecules in ice but not in water	molecules in ice travel more slowly than those in water
<b>C</b>	a regular pattern of molecules in both ice and water	molecules in ice travel more slowly than those in water
<b>D</b>	a regular pattern of molecules in both ice and water	molecules in both ice and water have the same average speed

- 23 The diagram shows a rectangular block of mass  $8.2\text{ kg}$  immersed in sea water of density  $1.10 \times 10^3 \text{ kg m}^{-3}$ .



What is the difference in pressure between the top and bottom surfaces of the block?

- A**  $2.2 \times 10^2 \text{ Pa}$
- B**  $2.2 \times 10^3 \text{ Pa}$
- C**  $1.8 \times 10^4 \text{ Pa}$
- D**  $2.3 \times 10^4 \text{ Pa}$

**Space for working**