

- 21** At a depth of 20 cm in a liquid of density  $1800 \text{ kg m}^{-3}$ , the pressure due to the liquid is  $p$ .

Another liquid has a density of  $1200 \text{ kg m}^{-3}$ .

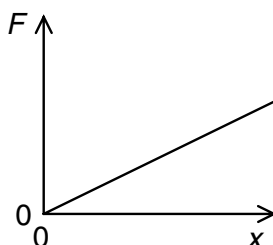
What is the pressure due to this liquid at a depth of 60 cm?

- A**  $\frac{p}{2}$       **B**  $\frac{3p}{2}$       **C**  $2p$       **D**  $3p$

- 22** Which line in the table gives approximate ratios of density and molecular spacing for a substance in its solid, liquid and gas phases?

	density	molecular spacing
	solid : liquid : gas	solid : liquid : gas
<b>A</b>	1000 : 1000 : 1	1 : 1 : 10
<b>B</b>	1000 : 100 : 1	1 : 10 : 1000
<b>C</b>	1000 : 1000 : 1	1 : 1 : 1000
<b>D</b>	1000 : 100 : 1	1 : 10 : 100

- 23** The variation of the extension  $x$  of a spring with applied force  $F$  is shown.



Which shaded area represents the work done when the extension is increased from  $x_1$  to  $x_2$ ?

