

- 18** In the kinetic model of gases, what is pressure equal to?
- A** the number of atoms hitting and rebounding from a surface of the gas container
  - B** the number of atoms hitting and rebounding from a unit area of the gas container surface
  - C** the force exerted by the atoms hitting and rebounding from a surface of the gas container
  - D** the force exerted by the atoms hitting and rebounding from a unit area of the gas container surface

- 19** A rectangular metal bar exerts a pressure of 15 200 Pa on the horizontal surface on which it rests.

If the height of the metal bar is 80 cm, what is the density of the metal?

- A**  $190 \text{ kg m}^{-3}$
  - B**  $1900 \text{ kg m}^{-3}$
  - C**  $19\,000 \text{ kg m}^{-3}$
  - D**  $190\,000 \text{ kg m}^{-3}$
- 20** Which row best defines elastic and plastic behaviour of a material?

	elastic behaviour of a material	plastic behaviour of a material
<b>A</b>	extends only within the limit of proportionality	extends beyond the limit of proportionality
<b>B</b>	has a linear force-extension curve	has a horizontal force-extension curve
<b>C</b>	obeys Hooke's Law	extends continuously under a steady load
<b>D</b>	returns to its original shape and size	suffers permanent deformation

**Space for working**