

**16** Which group of statements applies only to the liquid state?

**A**

atoms separated by many atomic diameters  
positions of atoms can change  
atoms vibrate

**B**

atoms separated by many atomic diameters  
atoms are in fixed positions  
atoms are in continuous, random motion

**C**

atoms can touch each other  
positions of atoms can change  
some random motion of atoms

**D**

atoms can touch each other  
atoms are in fixed positions  
some random motion of atoms

**17** A piece of copper is drawn into a continuous wire.

What behaviour is the copper exhibiting?

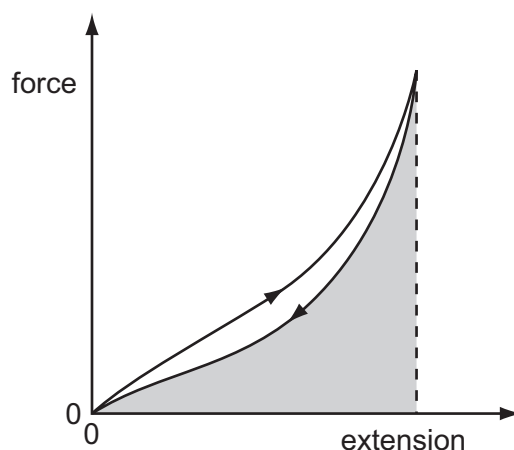
**A** brittle only

**B** elastic only

**C** plastic only

**D** both brittle and elastic

**18** The force-extension graph of a particular sample of rubber as a load is applied and then removed is shown.



What does the shaded area represent?

**A** the energy transformed into heat during the complete cycle

**B** the recoverable elastic potential energy stored at maximum extension

**C** the work done on the sample while loading

**D** the work done on the sample while unloading