16 The kinetic energy of a vehicle of mass 1000 kg is 4.5×10^5 J. It is stopped by applying a constant braking force of 6000 N.

What is its stopping distance?

A 37 m **B** 75 m **C** 150 m **D** 300 m

17 What are units of work, energy and power?

	work	energy	power
A	J	N m	J
B	$J s^{-1}$	J	$J s^{-1}$
C	N m	N m	W
D	N m	W	W

18 Below are four short paragraphs describing the molecules in a beaker of water at 50 °C.

Which paragraph correctly describes the molecules?

A The molecules all travel at the same speed. This speed is not large enough for any of the molecules to leave the surface of the water. There are attractive forces between the molecules.

B The molecules have a range of speeds. Some molecules travel sufficiently fast to leave the surface of the water. There are no forces between the molecules.

C The molecules have a range of speeds. Some molecules travel sufficiently fast to leave the surface of the water. There are attractive forces between the molecules.

D The molecules have a range of speeds. The fastest molecules are unable to leave the surface of the water. There are attractive forces between the molecules.

Space for working