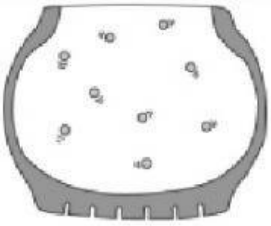
1 The diagrams on the right show the particles inside a car tyre at low pressure.

Complete the second drawing to show the particles in a tyre that has been pumped up to a higher pressure.



2 Use some of the words in the box below to complete the sentences below about air pressure.

hitting	less	move	more	still

a Gas particles _____ freely in all directions.

b Air pressure is caused by the gas particles _____ surfaces.

c You can increase air pressure by putting _____ air into a tyre.

3 When we turn on the vacuum pump the plastic bottle collapses.

Tick (✓) the correct phrase to complete these sentences.

A vacuum is an space which contains

... only air. ☐

... no particles. ☐

... only a liquid. ☐

... no solids or liquids. ☐

The bottle collapses because

... the particles on the inside stop moving. ☐

... the particles on the outside move faster. ☐

... the air pressure on the outside pushes it in. ☐

... the air pressure on the outside has increased. ☐

How do the air particles inside a car tyre cause pressure on the inside of the tyre? Tick **one** box.

☐ **A** The air particles bounce off each other.

☐ **B** The air particles are a long way apart.

☐ **C** The air particles are moving very fast.

☐ **D** The air particles hit the side of the tyre.

LIVEWORKSHEETS