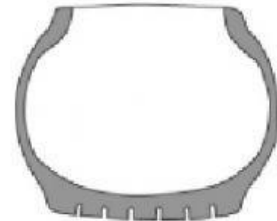
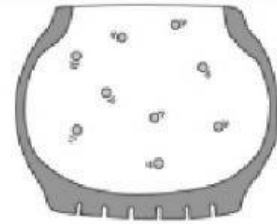


- 1 The diagrams on the right show the particles inside a car tyre at low pressure.

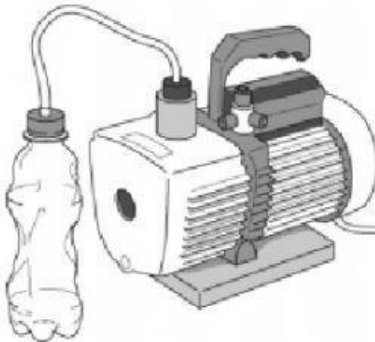
Complete the second drawing to show the particles in a tyre that has been pumped up to a higher pressure.



- 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.

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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.

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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.