

- 1 Decide if statements **A** to **H** are true or false. If a statement is false, write out the correct version.
- 2 Now look at your pairs of corrected statements, and decide if the second statement is an explanation of the first one.

	True	False
A Zain can't squash a snooker ball.	<input type="checkbox"/>	<input type="checkbox"/>

B Particles are far apart in a solid.	<input type="checkbox"/>	<input type="checkbox"/>
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Does **B** explain **A**? Yes or no? _____

C Mary can pour milk into a glass.	<input type="checkbox"/>	<input type="checkbox"/>
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D Particles in a liquid can move past one another.	<input type="checkbox"/>	<input type="checkbox"/>
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Does **D** explain **C**? Yes or no? _____

E The smell of the teacher's aftershave can spread throughout the room.	<input type="checkbox"/>	<input type="checkbox"/>
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F Particles in a gas are far apart.	<input type="checkbox"/>	<input type="checkbox"/>
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Does **F** explain **E**? Yes or no? _____

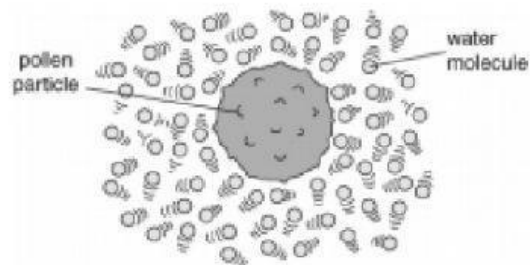
G Dani can squash more than a litre of orange juice into a litre carton.	<input type="checkbox"/>	<input type="checkbox"/>
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H There are large gaps between the particles in a liquid.	<input type="checkbox"/>	<input type="checkbox"/>
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Does **H** explain **G**? Yes or no? _____

The diagram and sentences below describe Brownian motion and how it can be explained.
Complete the sentences below using words from the box.

change	directions	colliding	microscope	many
	moving	particle	push	



- 1 Brownian motion was first seen by looking at pollen grains in water with a _____.
- 2 The pollen was seen to be _____ jerkily in different directions.
- 3 This can be explained by the _____ theory of matter.
- 4 Water, like all matter, is made up of tiny particles that are moving about in all _____.
- 5 The water particles therefore are _____ with the pollen grains.
- 6 This will _____ the pollen grain.
- 7 If _____ water particles hit one side of a pollen grain then, they push the pollen in that direction.
- 8 Since the particles move at random the direction the pollen is pushed in will _____ all the time.