## Particle nature of matter

## This task is about the states of matter: solid, liquid and gas.

Decide whether each of the statements below is true or false. Give reasons for your answers in terms of your knowledge of the particle nature of matter.

<b>Statement 1:</b> "ፐ	ne particles in hot water move faster and are further apart than those in cold water."
Is this true? <i>True</i>	e   False
Reason:	
	ne particles in orange juice are close together but they can move around."
Is this true? <i>True</i>	e/ False
Reason:	
	hen a solid cools, the particles vibrate more slowly and get smaller."
Is this true? <i>True</i>	e/ False
Reason:	
Statement 4: "Li	quid nitrogen has the formula N <sub>2</sub> . When liquid nitrogen boils the gas has the formula
N."	
Is this true? <i>True</i>	e/ False
Reason:	
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