

**Scenario 1**

Use particle theory to explain the following change of state -  
**solid to liquid**

**Scenario 2**

Use particle theory to explain the following change of state -  
**liquid to gas**

**Scenario 3**

Use particle theory to explain the following change of state -  
**gas to liquid**

**Scenario 4**

Use particle theory to explain the following change of state -  
**liquid to solid**

**Scenario 5**

Use particle theory to explain the following change of state -  
**solid to gas**

**Solid to liquid**

**Keywords to include:**

kinetic energy vibration temperature state melting

**Liquid to gas**

**Keywords to include:**

kinetic energy direction speed evaporation state

**Gas to liquid**

**Keywords to include:**

kinetic energy temperature movement state condensing

**Liquid to solid**

**Keywords to include:**

kinetic energy freezing temperature vibration state

**Solid to gas**

**Keywords to include:**

kinetic energy movement vibration temperature sublimation

### Teaching notes

Print the first two pages onto one sheet so that you have a set of 5 double sided cards. Print enough so that each group/pair has a card.

Split the class into small groups or pairs and give each group a card. Allow them a few minutes to prepare a response to the instruction on their cards (they could draw a cartoon, prepare a 30 second play or simply read out their answer).

They should aim to include all of the keywords that they have been given.

Ask students to peer assess the presentations and suggest how they could be improved.

To differentiate give some students cards with less or no keywords.