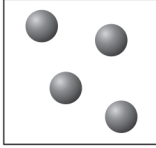
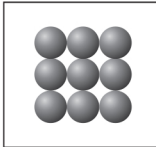
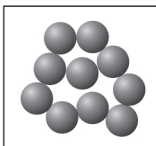


1.1 The three states of matter can be represented by the simple particle model.

a Match each diagram to the correct state of matter. (3 marks)

Solid	
Liquid	
Gas	

The temperature at which a substance changes from a liquid to a solid is known as the **freezing point**. This can be investigated by heating a solid until it melts and then recording the temperature at regular intervals as it cools.

Some results of an experiment are shown below.

Time/minutes	Temperature/°C
0	80
1	76
2	73
3	72
4	72
5	72
6	72
7	71
8	68
9	64
10	60

b Choosing a suitable scale, plot these points on graph paper. (3 marks)

c Join up the points with a line and state the freezing point of this solid. (2 marks)

d State **one** limitation of the simple particle model when it is used to explain changes of state. (1 mark)

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