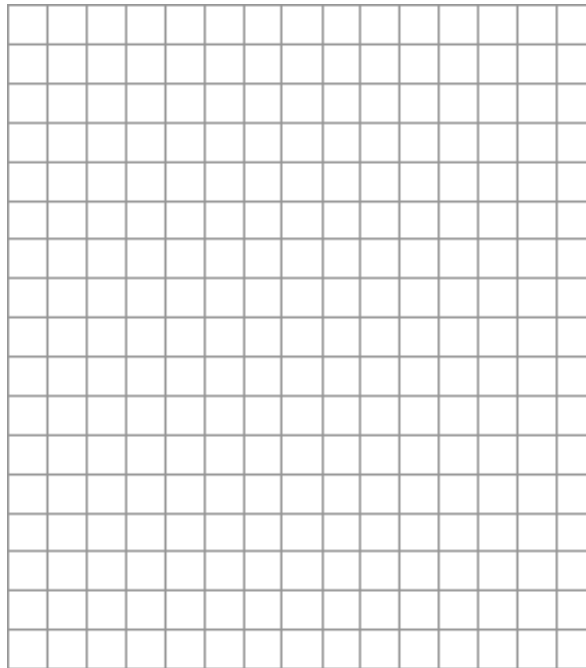


Heating meths

This task is about what happens with particles when heating methylated spirits.

Methylated spirits (meths) is almost pure ethanol. Lana wanted to find its boiling point.

- . She weighed 20 mL of meths into a small boiling tube and heated this in a waterbath.
 - . She recorded the temperature and observed the meths every minute. The temperature inside the laboratory that day was 18°C.
 - . After 4 minutes the meths started to boil. The temperature of the meths was then 78°C.
 - . After 7 minutes all the meths had evaporated from the boiling tube.
- a) Draw and label a graph of temperature versus time for Lisa's investigation.



- b) Explain, in terms of particles, what is happening during the sloping section of the graph.

- c) Explain what happens to the particles in the flat section of the graph.
