



Follow the Scent

- Name the three states of matter, describe the motion of their particles, and draw their molecular arrangement in the table below.

State of Matter	solid	liquid	gas
Particle motion			
Molecular arrangement			

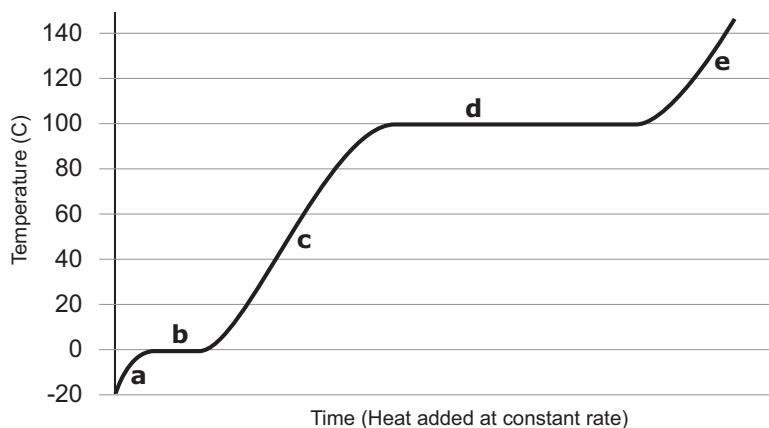
- How does the motion of the particles affect the properties of the state of matter? (Consider density and ease of compression).

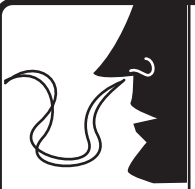
- Which size of molecule requires more energy to evaporate?

- What is the name given to the process of a liquid becoming a gas?

- What is the name given to the process of a gas becoming a liquid?

- If pure ice is heated from -20°C to 140°C , explain what happens at each point marked in the curve and give a value in $^{\circ}\text{C}$ for the points marked **b** and **d**.





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- Why does hair dry without the need for heat?

- What is the process of distillation? (You may need to research this further)

- How is it that you can smell your friend's freshly applied perfume from the other side of the room?

- Why does a fragrance often smell different at the end of the day than it did in the beginning?

- How many families of fragrance are there and what are they?
