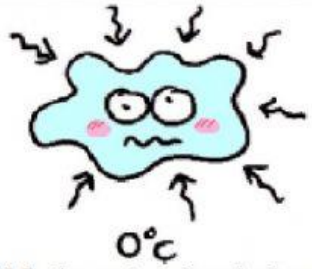
Latent Heat of Vaporization

By Esther

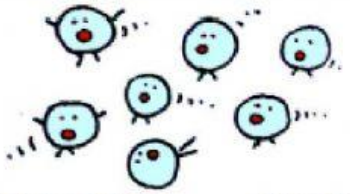
What will happen if we continue heating up the water?

1.



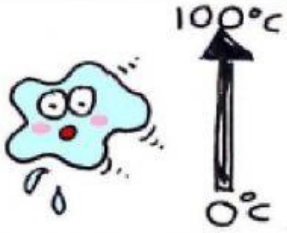
At 0°C, the water absorbs **heat**...

2.



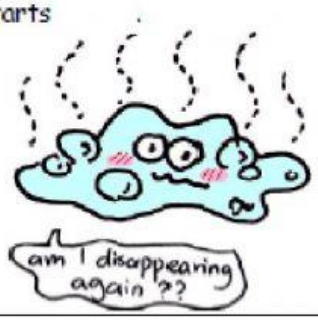
Heat energy → energy

The **water** molecules gain **kinetic energy** and move around .

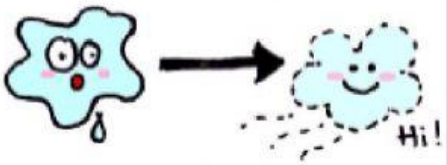


3. The **temperature** of the **water** **rises** from **0°C** to the **point** of water **100°C**.

4. At **100°C**, the water starts

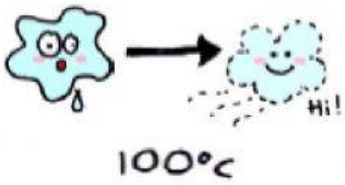


5. It does not disappear!



The **water** changes into ! This process is called **vaporization.**

6. During **phase change**, the temperature at **100°C**.



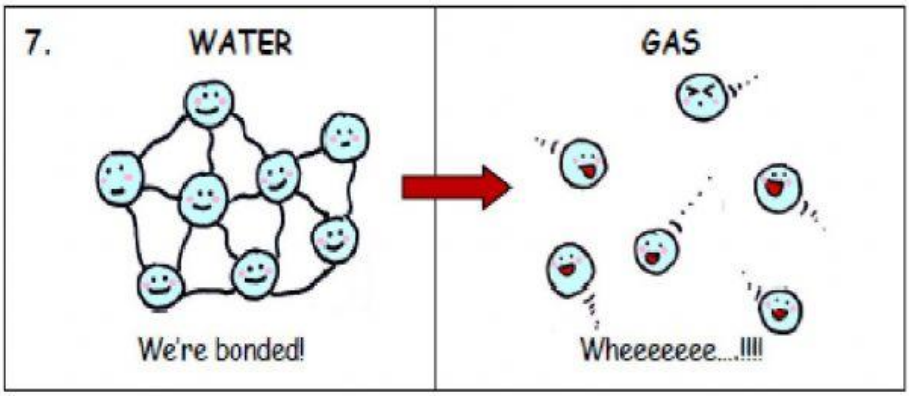
There's in **temperature**!

Q: If there is no change in temperature of water and steam during phase change, what happen to the heat absorbed by water?

Tick the correct statement:

- ☐ Weaken the bonds between the water molecules.
- ☐ Increase the kinetic energy of water molecules

7.



The heat required to change 1 kg of substance from liquid to steam is

Latent heat of Vaporization, ℓ (J/kg)