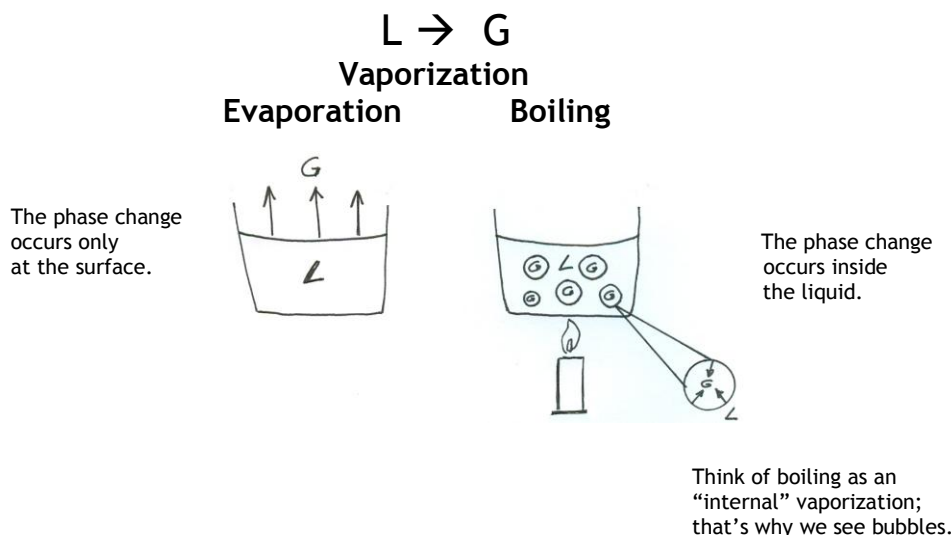


Aim: What is the nature of Liquids?

1. Demo: streak a liquid on the board

It "dries". Better said, it "evaporates".

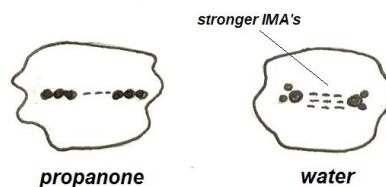
What's the difference between evaporation and boiling?



2. Demo : streak different liquids on the board

Different liquids evaporate at different rates (speeds).

Why? Propanone evaporates faster because it has weaker "attractions".*

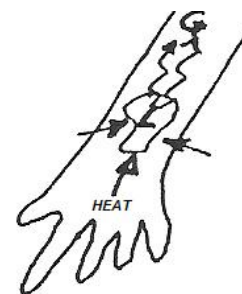


*Technically, they are called intermolecular attractions (IMA's); the forces between molecules that cause them to stick to each other
(Label these liquids on Table H. Ethanoic acid would have the strongest IMA's, propanone the weakest. I didn't use EA b/c it smells bad.)

3. Demo: touch cotton ball soaked with propanone

"It feels cool." Why?

- Evaporation has a cooling effect on your body.
- A liquid absorbs heat from your body as it evaporates. It's an ENDOTHERMIC process.
- Condensation is the complete opposite of evaporation.



4. Demo: splash water on table

To make a liquid evaporate faster:

- | | |
|------------------|----------------------------------|
| | <u>Why?</u> |
| a. heat it | increases KE, breaks attractions |
| b. spread it out | increases surface area |
| c. blow on it | increases surface area |