

Homework for Wednesday:

**Add these notes and diagrams to your book
(remember headings, underlining, pencils for
diagrams and colours to make things standout)**

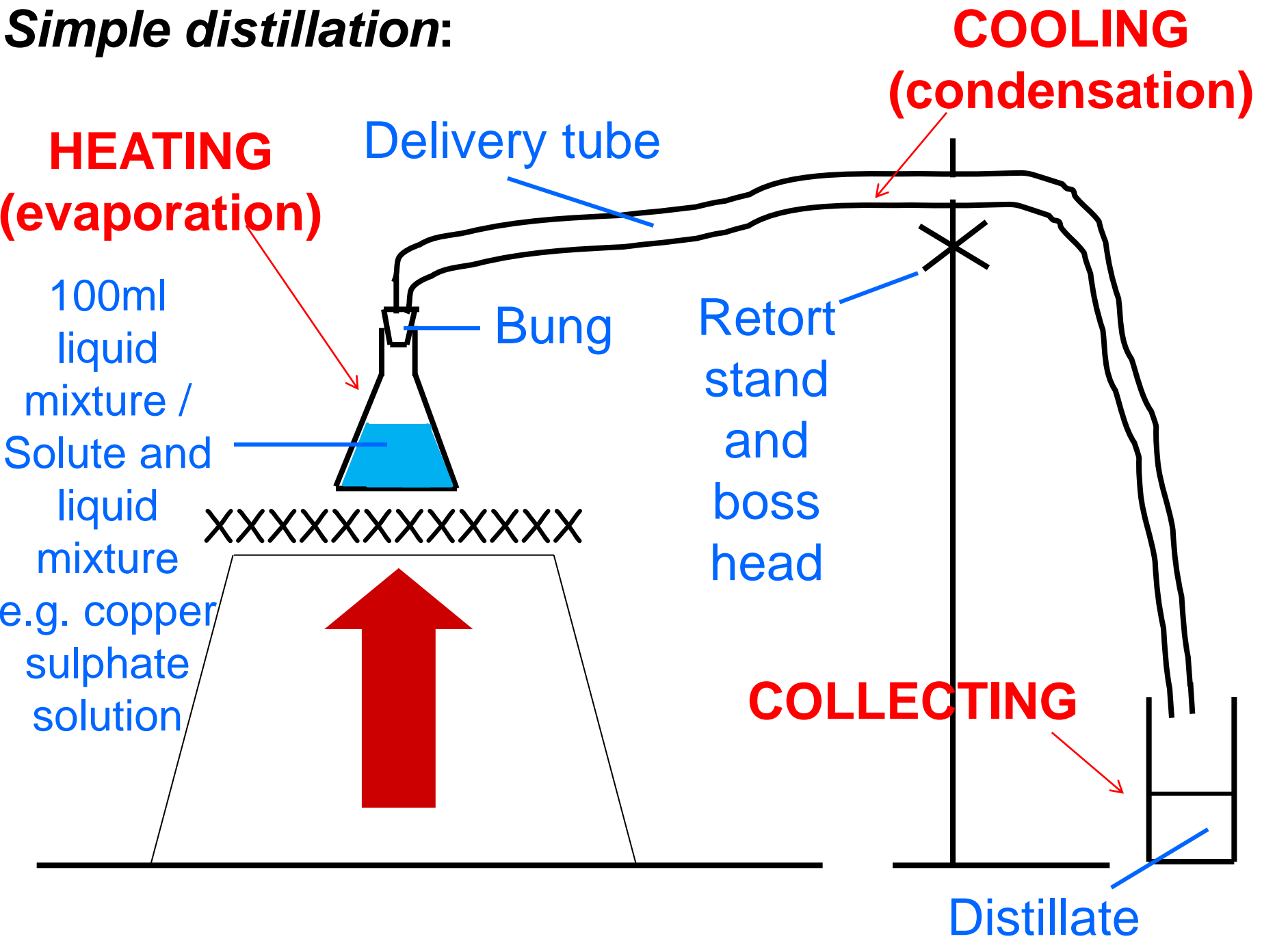
3. Distillation

PART A - Simple distillation:



This separates a soluble solid from a liquid but importantly this time the liquid is collected as well as the solid. The gas condenses back to a liquid again.

Simple distillation:



It is quick and simple to use but not that effective, why?

The collecting tube and beaker heats up so much that only a small amount of water is collected, the rest is lost as water vapour as it cannot cool and condense.

Another problem is you don't know what has distilled because you don't know what the temperature is when the gas forms

Could you suggest some simple improvements?

- 1. Keep the collecting tube cold or longer and also trap more vapour*
- 2. Attach a thermometer to the apparatus*