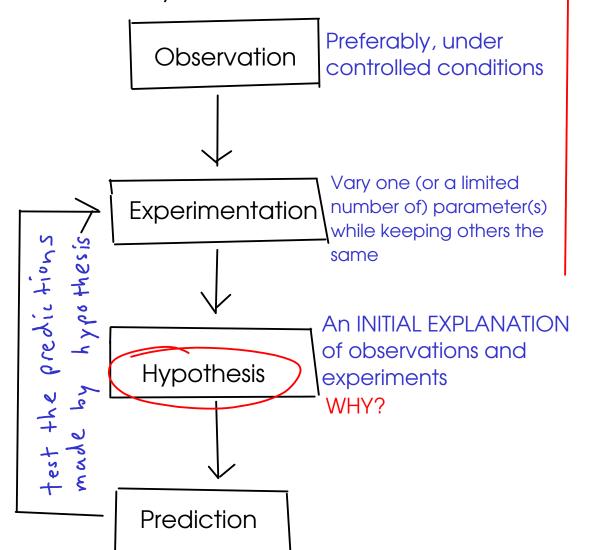
## Some basic definitions:

Chemistry: SYSTEMATIC STUDY OF MATTER AND THE CHANGES IT UNDERGOES

Matter: Anything that takes up space and can be perceived (or DETECTED)

... so what about SYSTEMATIC STUDY?

Systematic study? The scientific method



## Scientific laws

- are SUMMARIES of observations, often in equation form

Scientific laws DO NOT EXPLAIN the observations they are describing. In other words, they tell WHAT, not WHY.

## Scientific theories

- are EXPLANATIONS of observations that have been supported by many experiments
- similar to HYPOTHESES, but with a lot more supporting data

Explanations are called theories when there's enough data for most scientists to accept the explanation as valid.