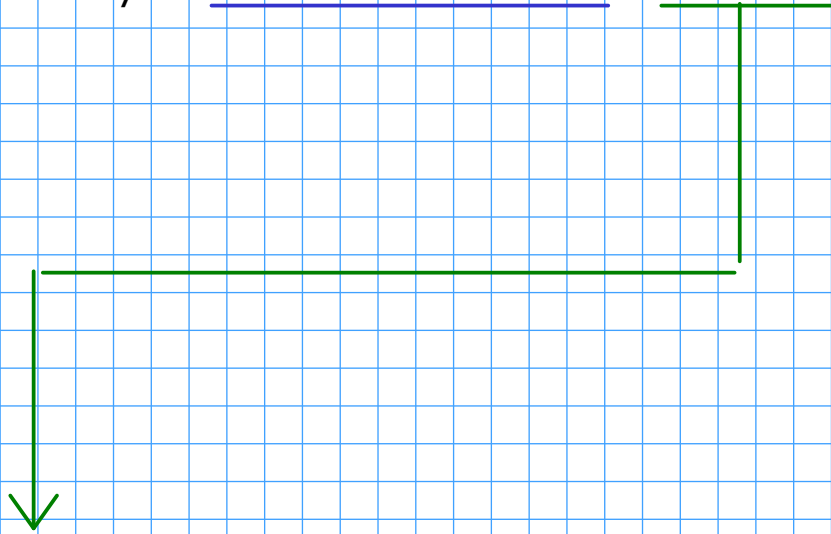


Some basic definitions:

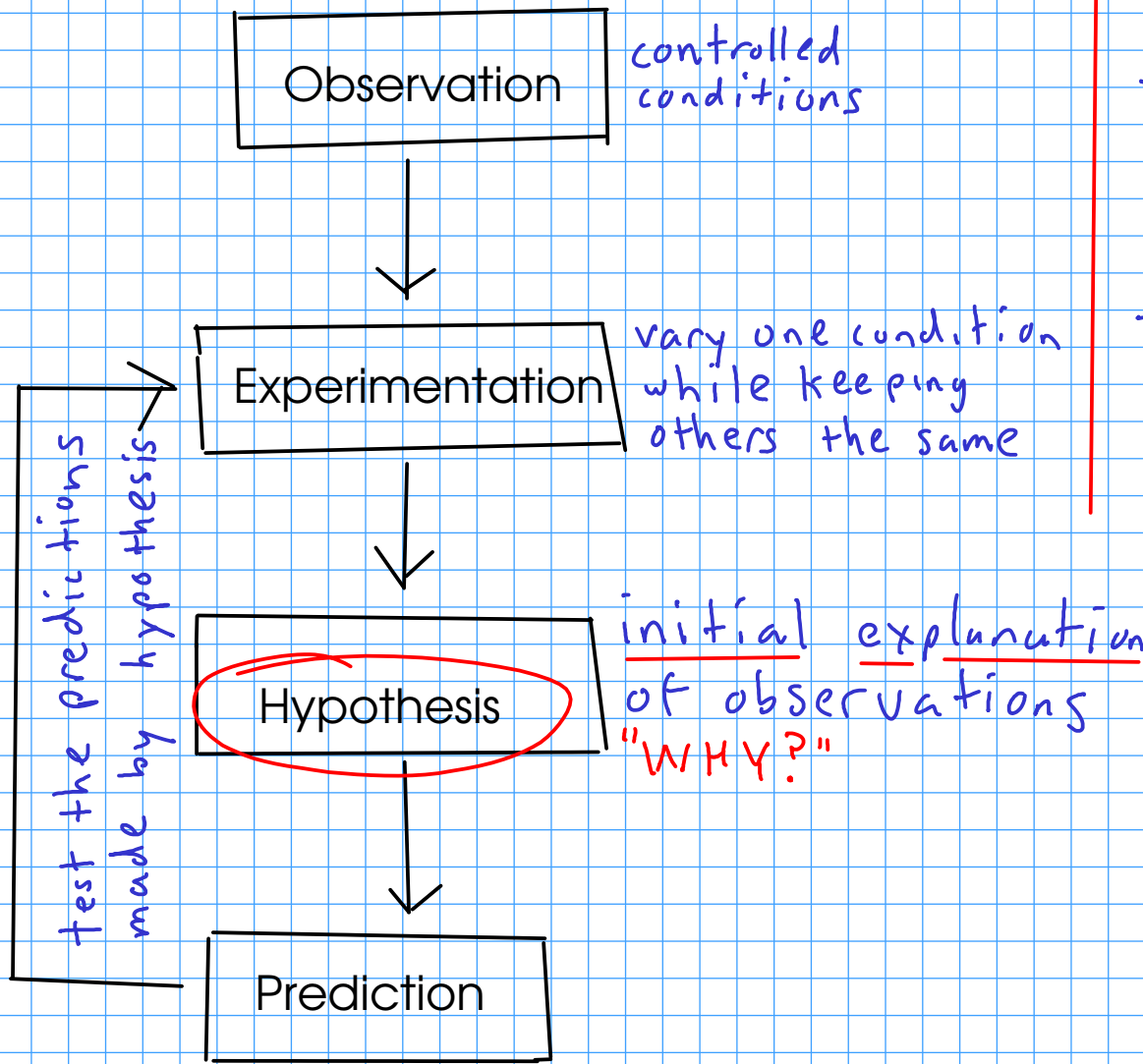
Chemistry: SYSTEMATIC STUDY OF MATTER AND THE CHANGES IT UNDERGOES



Matter: ANYTHING THAT TAKES UP SPACE AND CAN BE PERCEIVED (DETECTED)

... so what about "SYSTEMATIC STUDY"?

Systematic study? The scientific method



Scientific laws

- SUMMARY of observation often in equation form.
- DOES NOT EXPLAIN OBSERVATIONS

Scientific theories

- an EXPLANATION of observations confirmed by repeated experiments
- accepted by most scientists

You flip the light switch in your den, but nothing happens. What is wrong?

observation/experiment: Flip switch, no light!

→ hypothesis: ~~Explanation: The bulb is burned out.~~
Explanation: Circuit breaker has tripped.

prediction: Changing the light bulb will cause the light to come on/
Resetting the breaker will restore the light.

experiment: Change the bulb, then flip the switch. Result: It's still dark.
Reset the breaker. Result: Light is on!

↑ this data supports the current hypothesis.