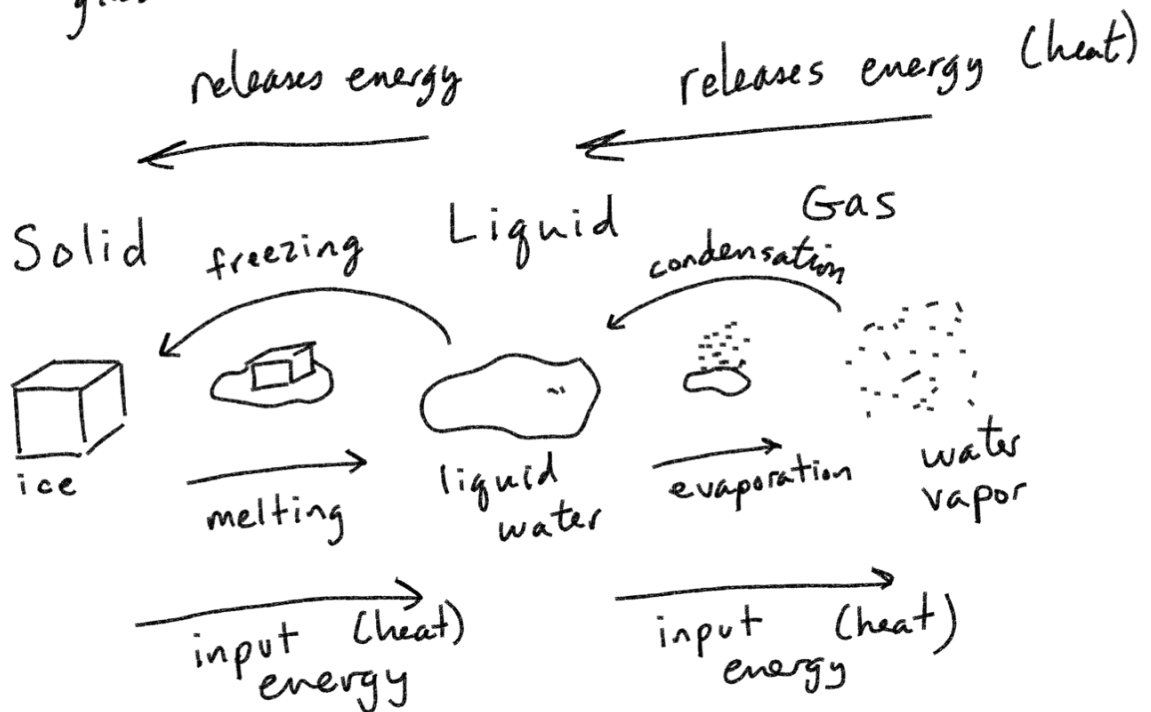
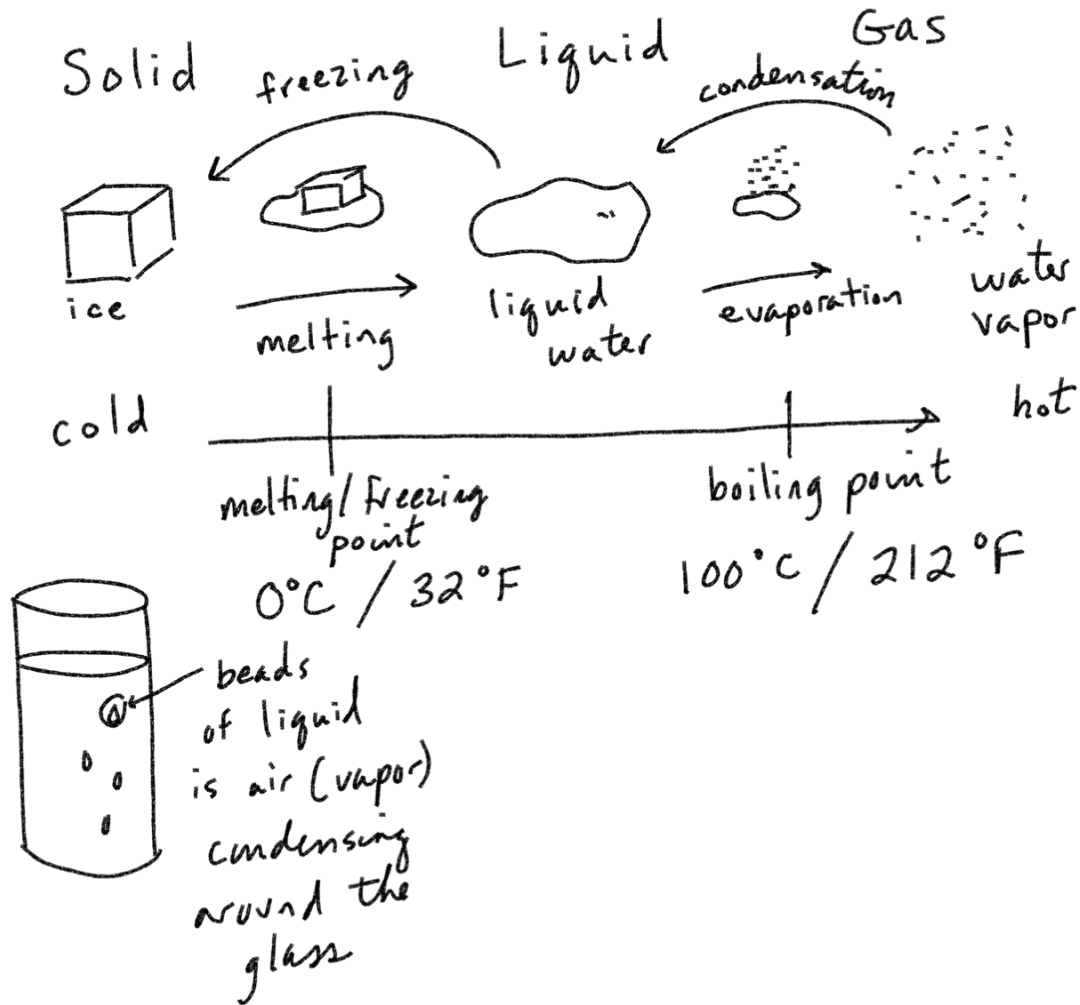
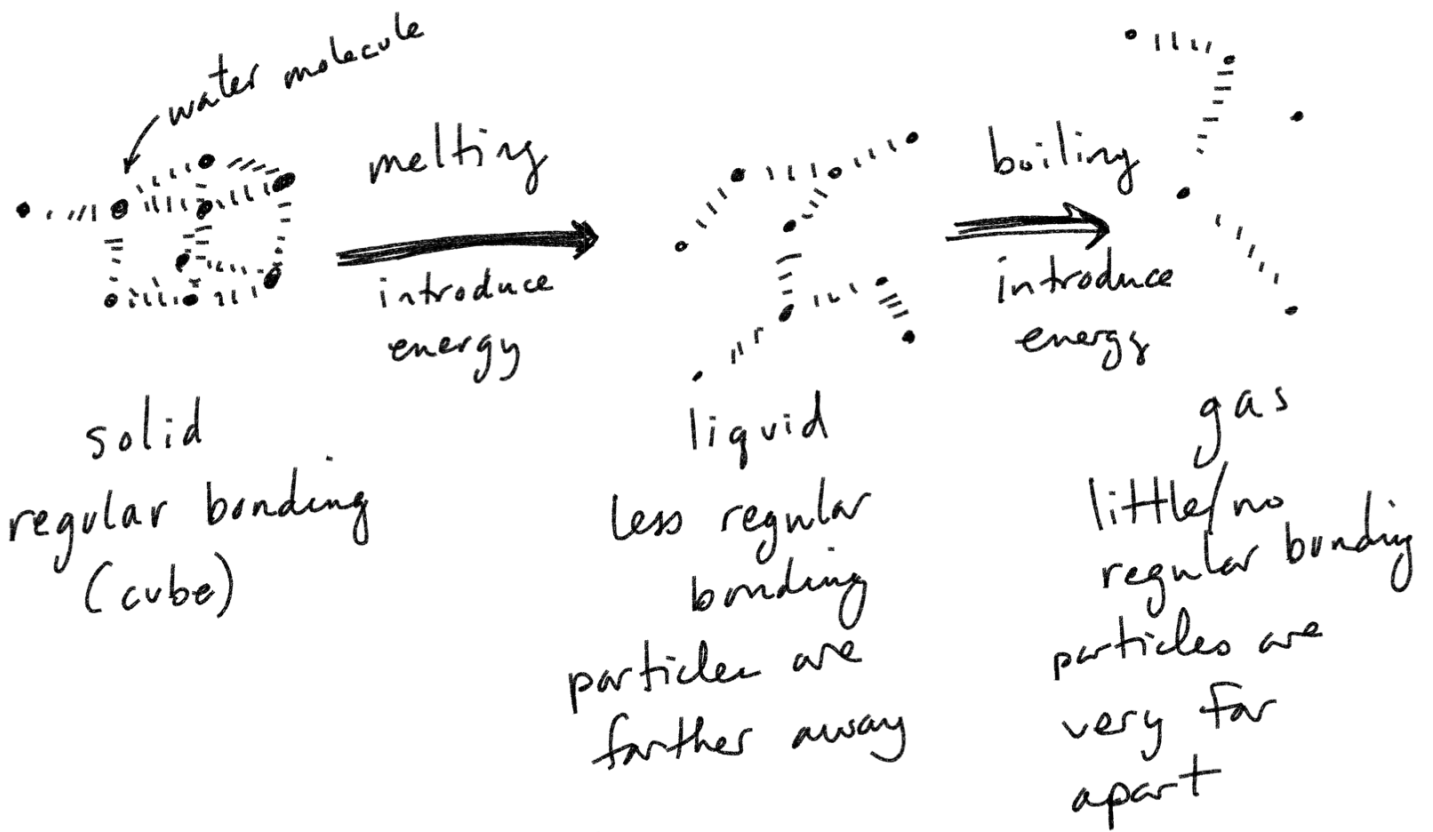


W-PS Physical Science Week 20

Phases of Matter





Calorie → unit of energy

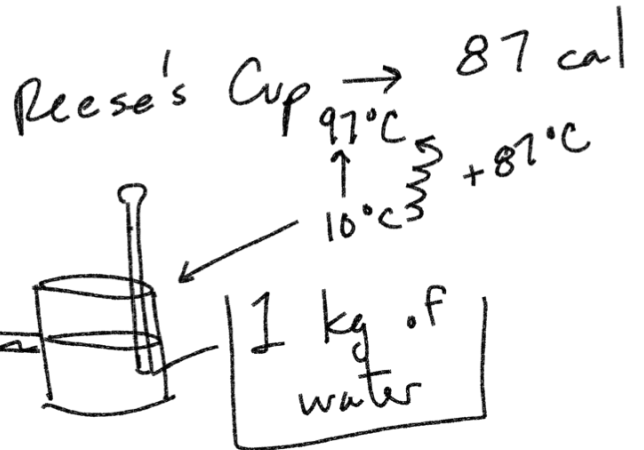
↳ actually a kilocalorie

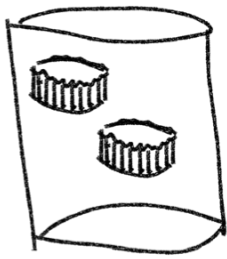
{ A calorie is the amount of energy required to raise the temperature of 1 kg of water by 1°C.



Bomb calorimeter

#1 Rule in Science
"Kill with fire"





Bomb calorimeter

2 (87 cal)

174 cal



1 kg

100°C

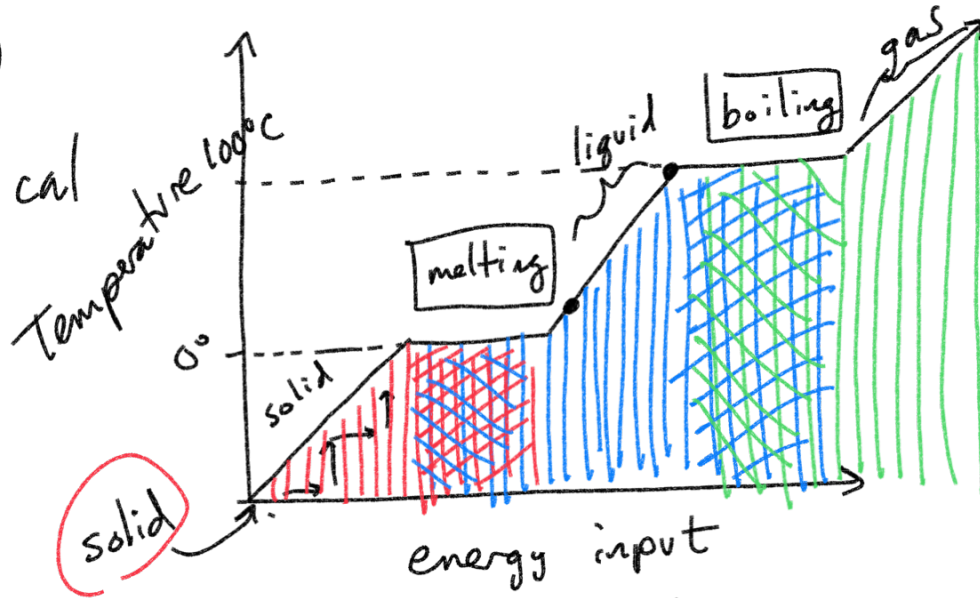
+ vapor

~~184°C~~

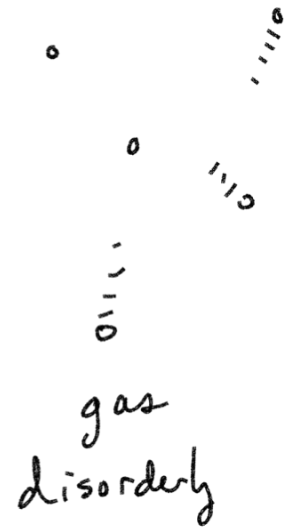
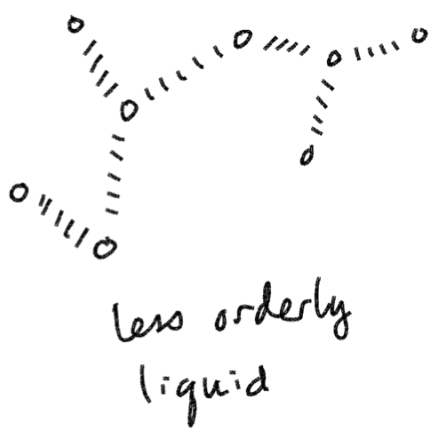
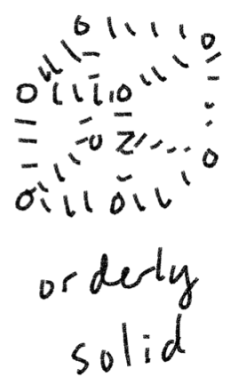
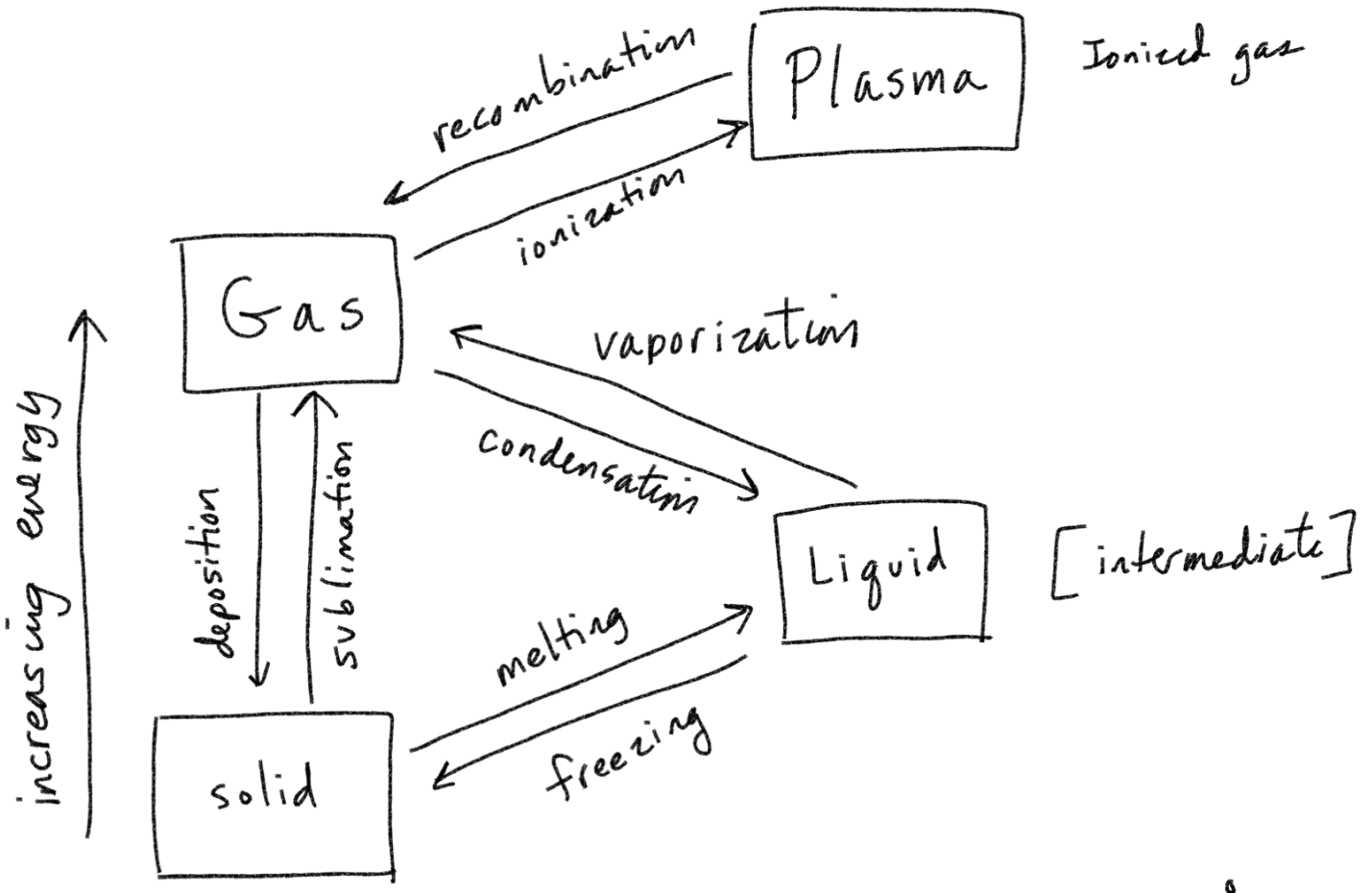
10°C

+174

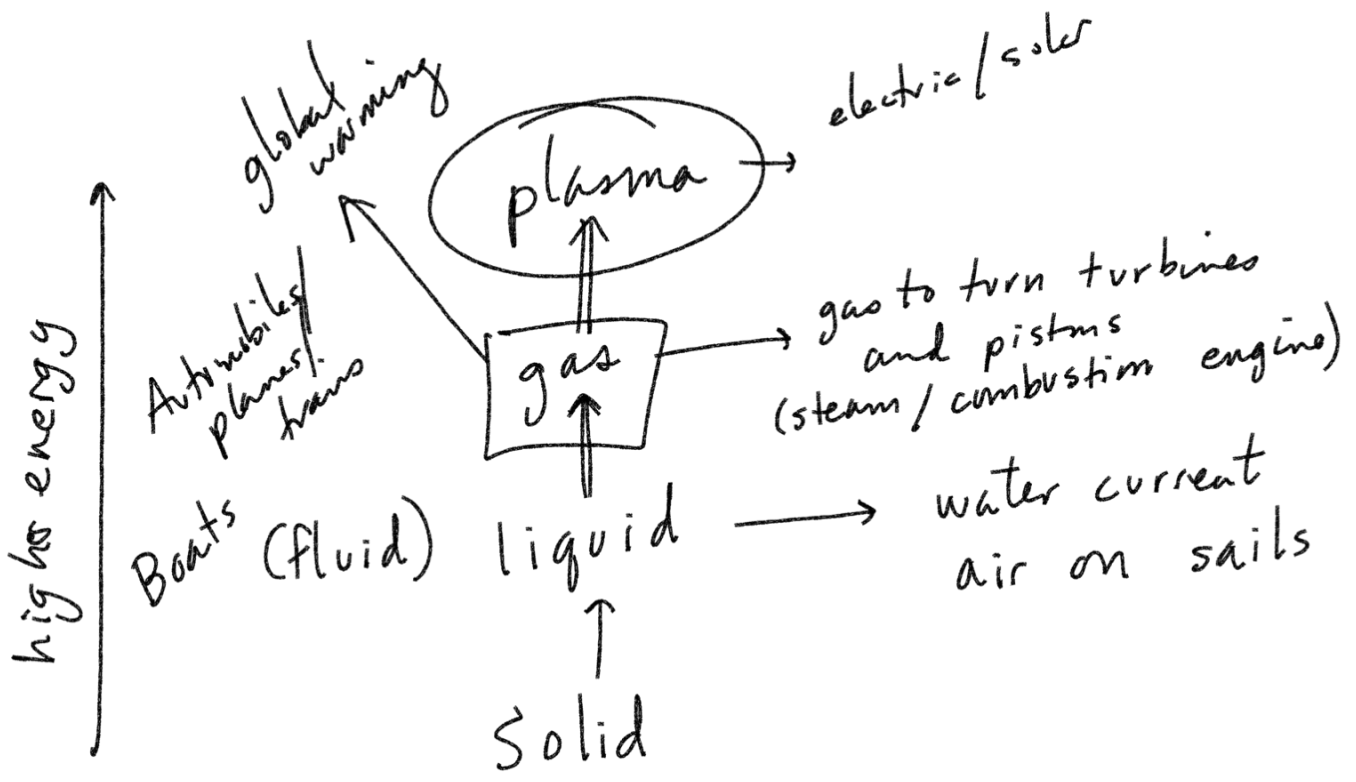
not water at 184°C → Boiling point of water is 100°C



phase change diagram

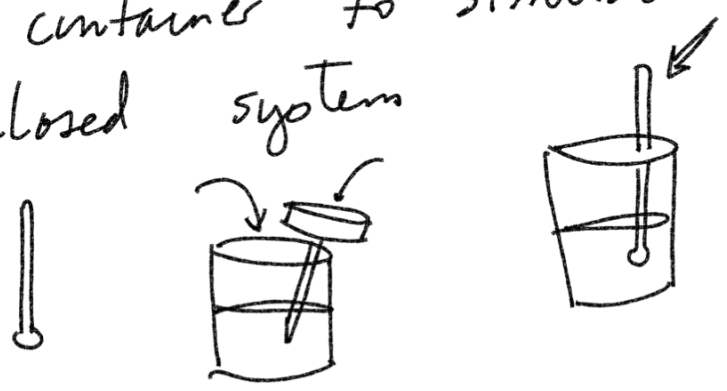


plasma like a gas - but with charged particles



Bomb Calorimeter

- Styrofoam cup (thermos)
insulated container to simulate a closed system
- thermometer
- kitchen scale to measure 1 kg of water



Exergonic Reaction
energy released - temperature increases

Endergonic Reaction
energy absorbed - temperature decreases

HW
get supplies
(email m
Sunday)
online HW 20 } March 3rd
Quiz 20 }
HW / Quiz 18 Feb 19th
HW / Quiz 19 Feb 26th