

10/19/17

## Matter Homework





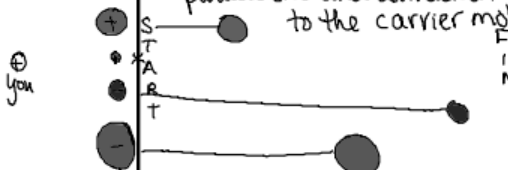


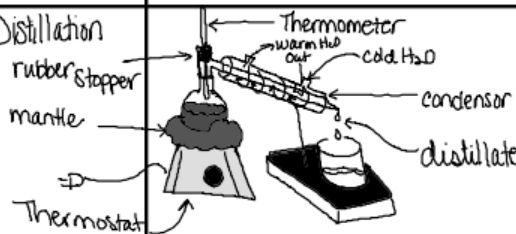
- |       |        |        |       |
|-------|--------|--------|-------|
| 1. CP | 6. IP  | 1. C   | 6. C  |
| 2. EP | 7. EP  | 2. P   | 7. C  |
| 3. IP | 8. IP  | 3. P+C | 8. P  |
| 4. CP | 9. CP  | 4. C   | 9. P  |
| 5. CP | 10. IP | 5. P   | 10. C |

P.C. tore, crumpled, ink bleeding,  
melted

C.C. coffee, dissolved sugar,  
wick burned.

- |            |                   |
|------------|-------------------|
| 1. soln.   | 6. hetero./soln.  |
| 2. element | 7. soln.          |
| 3. hetero. | 8. compound       |
| 4. hetero. | 9. element        |
| 5. hetero. | 10. hetero./soln. |

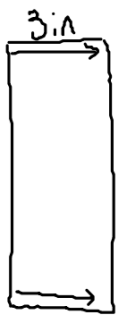
SWAT: List + describe separation techniques

Method	Description	Basis of how it works
Visual Separation	 Visually identify differences + then use your hands to pick apart.	Visual differences 
Filtration	 Separation based on particle size and holes or pores.	particle size
Evaporation/Crystallization	Separation that occurs when the liquid evaporates leaving pure crystals behind	 Crystal formation
Chromatography	Separation that occurs due to difference in particle size and attraction to the carrier molecule. 	Size + charge of particles
Magnetism	Separation of particles based on magnetic properties	 Magnetic Character
Electrolysis	 Separation by running electrical current through a substance	electricity used to break bonds
Distillation		Separation by boiling point

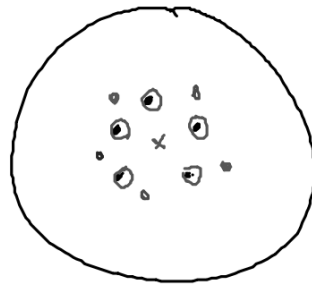
2 or more combined liquids are separated as one boils at a lower temperature than the others.

Lab:

Create a wick out of a paper towel. - take a 3inch piece of paper towel + roll it tightly.





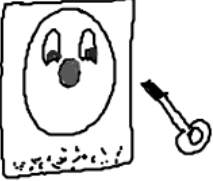


twist top portion tightly



5 black dots  
Circle the black dots

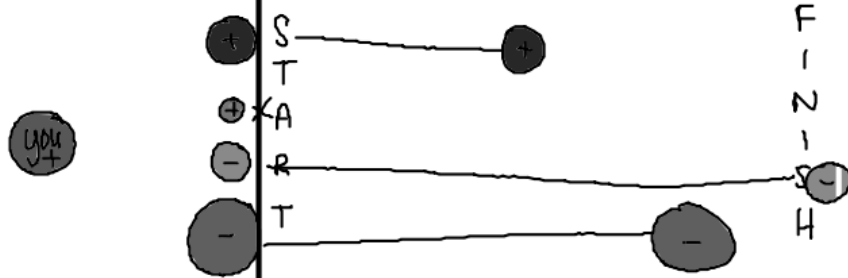
# SWAT: List + describe separation techniques

Method	Describe	What it's based on:
Visual Separation	 Visually identifying parts + then separating them by hand.	Visual appearance 
Filtration	 Separation by size of item in comparison to size of hole or pore.	Size of item
Evaporation/Crystallization	When the liquid evaporates crystals of the substance form.	 Crystal formation
Magnetism	Separation of mixed items by using a magnet	 magnetic characteristic

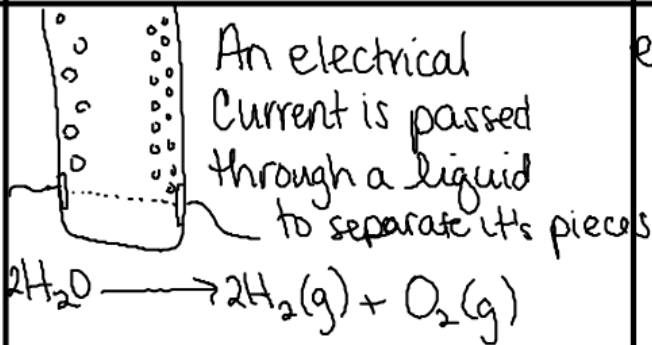
# Chromatography

Separation based on how far a particle will be carried based on attraction + size

Attraction + size



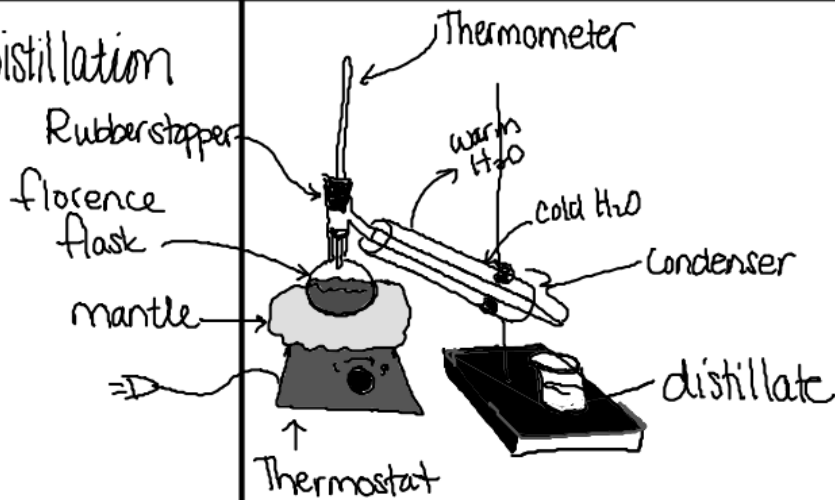
# Electrolysis



An electrical current is passed through a liquid to separate it's pieces

electrical current

# Distillation



boiling points

Separation of 2 or more liquids based on a difference in boiling point