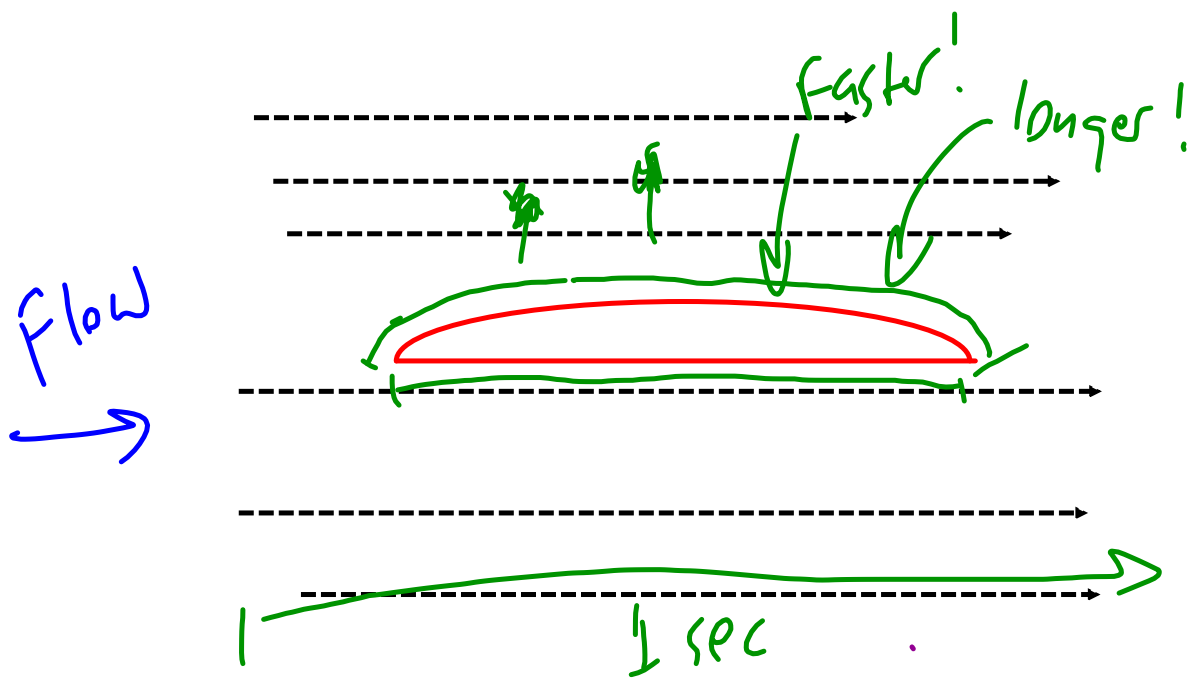


Mixture Separation

Name
Date
period
9, 42

1. mass the mixture
2. separate mix, mass each substance
3. add up masses $\text{---g} + \text{---g} + \text{---g} = \text{---}$
4. Before --- = after --- ?



Bernoulli's principle

↑ speed of fluid ↓ pressure

$$\text{Pressure} = \frac{\text{Force}}{\text{Area}} = \frac{\text{N}}{\text{m}^2} = \frac{\text{kg} \frac{\text{m}}{\text{s}^2}}{\text{m}^2}$$

$$\text{Pascal} = \frac{\text{N}}{\text{m}^2}$$

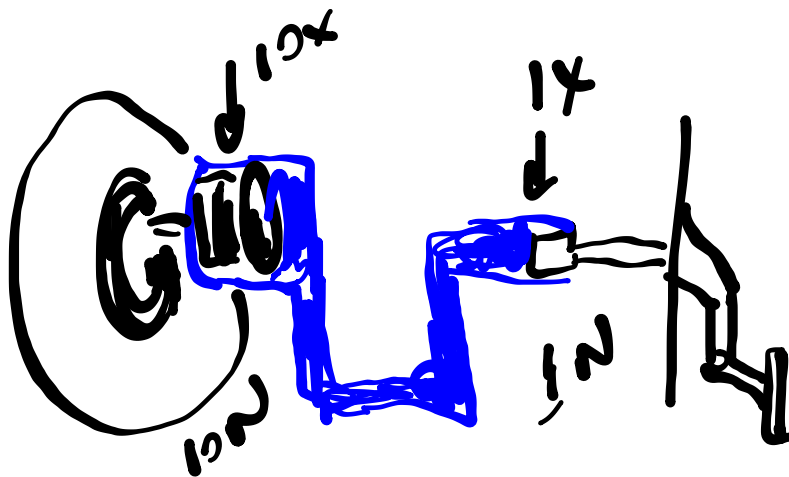
↙ ↘

Fluid Pressure = All ptcls. forces
push in all directions = whole fluid Press.

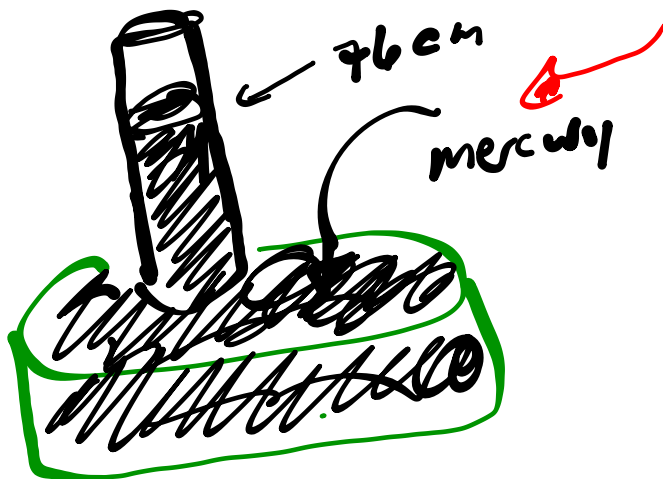
Air Pressure = $\text{m}^3 \text{ air} = 1 \text{ kg}$
 $10.13 \text{ N/cm}^2 = \frac{\text{washing machine}}{\text{hand size}}$

Pascal's Principle

force on confined fluid, Δ press
= over all parts.

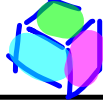









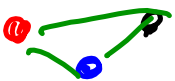
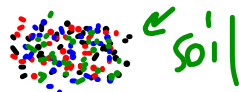


Barometer - liquid mercury Hg
76cm
↑ pressure ↓
measurer



H₂O → 11m

Ana Roid
Barometer
no liquid

| | | |
|-------------------|--|---|
| Matter | mass + size |  |
| Chemistry | study Δ matter |  |
| substance | pure - specific, unique |  |
| Chemical Δ | Substance Δ |  |
| Physical Δ | Δ can go back to original |  |
| element | pure, unique Can't be broken down further |  |

| | | |
|---------------|---|--|
| Atom | basic ptcl. making elements |  |
| bond | force of attraction between atoms |  |
| molecule | 2 or more atoms bonded |  |
| Compound | 2 or more elements bonded in specific ratio | H ₂ O |
| Chem formula | element symbols in ratio | $\overset{+1}{C} \overset{-2}{O}_2$ |
| Mixture | 2 or more subst. <u>not</u> bonded |  ← soil |
| heterogeneous | Separated mix substances |  dressing |
| homogeneous | Mixed thoroughly dissolved ex. solution |  koolaid |