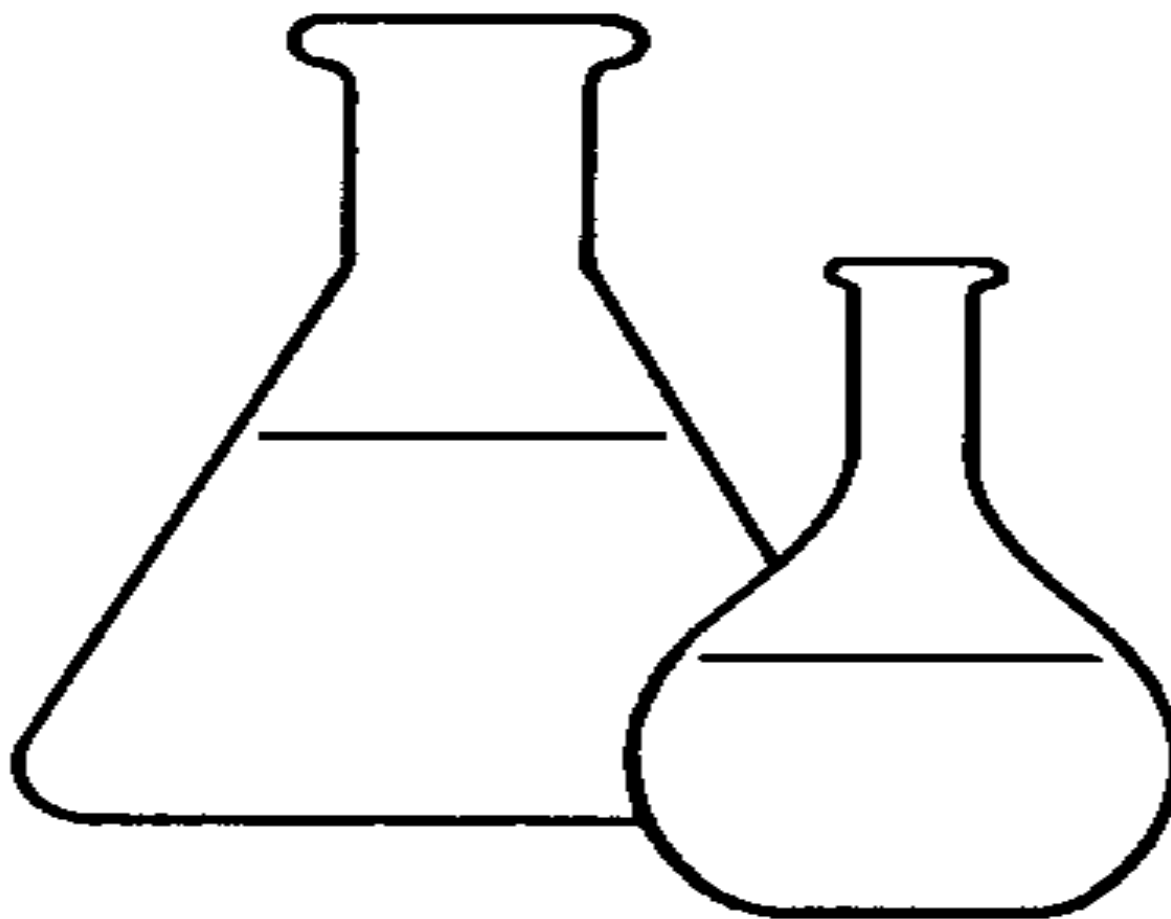


Chemistry II

Welcome



Why are you here?



- ∞ First, you are here because you chose to be here
- ∞ College prep
- ∞ Thinking about a science or technical career
- ∞ Building a bridge to your future. Giving yourself **OPTIONS!**

What Chemistry offers you

1. College prep & a competitive advantage

2. Medical field



3. Doctor, dentist

1. Nursing

2. Physical therapy, occupational therapy

3. Medical technician

What Chemistry offers you



3. Any Science field require chemistry
 1. Engineering
 2. Computer hardware
 3. Biology, Geology & other “ologies”
4. Citizenship - Making informed decisions
 1. Global warming
 2. Energy crisis

More good stuff



- ∞ A chemistry background is a bridge crossed
- ∞ Colleges know that you have taken a challenging curriculum
- ∞ You develop a greater understanding of the world in which we live

Atomic structure practice

What you know from MATTER

∞ Atoms?

∞ Ions?

∞ Isotopes?

Answer these



1. Ca represents an ____?
 - A. An atom of Calcium
2. Ca^{+2} represents an ____?
 - B. An ion of Calcium (a cation)
3. O^{-2} represents an ____?
 - C. An ion of Oxygen (an anions)
4.
 - D. Isotopes of carbon

4. What are these?



Isotopes



mass number



y

z

XX ← symbol for the element



atomic number - this is often left out because it can be determined from the symbol

Review



- ⌘ Atomic number is the number Protons & electrons
 - ⌘ These are equal for atoms (not ions)
- ⌘ Mass number is the *AVERAGE* mass of all isotopes of that element
- ⌘ Finding the neutrons: subtract the atomic number from the mass number this equals the number of neutrons (round off the mass number)

Example



- ∞ Element - Cesium Cs
- ∞ Atomic number 55 so (55 P+ 55e-)
- ∞ Mass number 132.9 (average) round 133
- ∞ $133 - 55 = 78$ so (78 No)
- ∞ This is a question on the final!