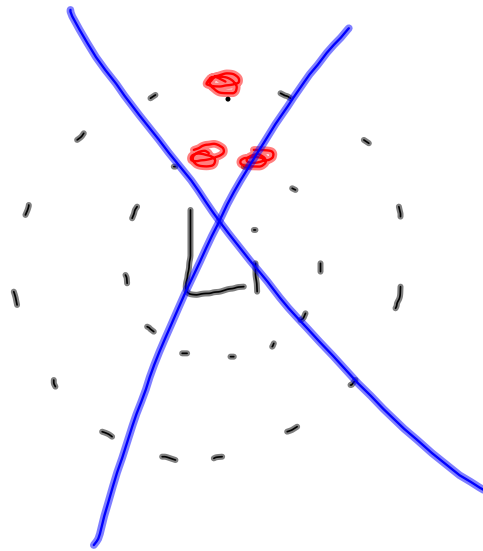


**p. 136 #10-13**  
**Worksheet**

## Unit 1 - Classification of Matter

- Types of matter
- Periodic table - trends, families, etc.
- Periodic law
- Elements
- Atoms
- Isotopes
- Ions
- Bohr Theory
- Quantum Mechanical Model
- Electron configurations



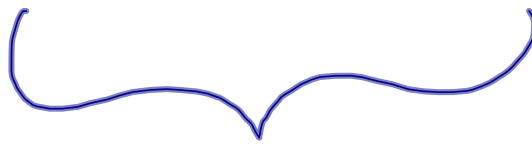
$\text{CO}_2$

$\text{CO}_2, \text{O}_2$

Isotope Name	Atomic Number	Mass Number	Symbol	# of Protons	# of Neutrons
Carbon-14	6	14	${}^6_6\text{C}$	6	8

$$12.000 (98.89\%)$$

$$13.003 (1.11\%)$$

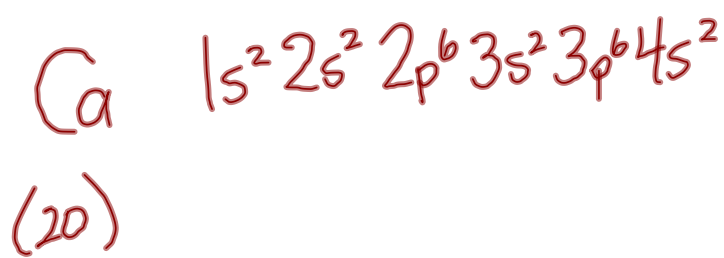
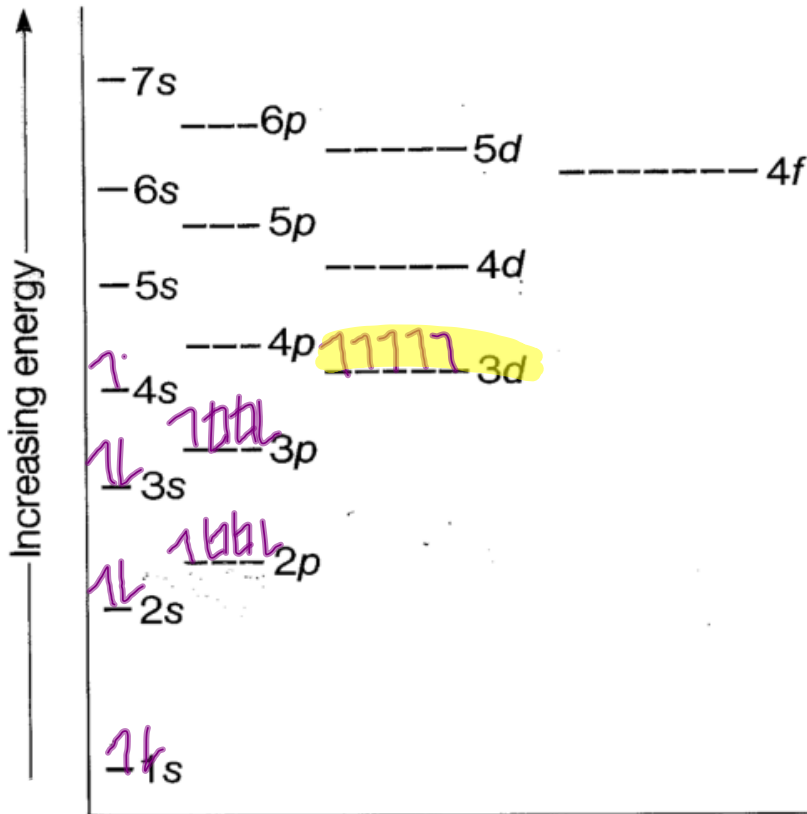


$$12.000(0.9889) + 13.003(0.0111)$$

$$12.01$$

Name	Symbol	# of Protons	# of <del>Neutrons</del> <sup>Electrons</sup>	Gain or Lose?	Net Charge
sulfide ion	$S^{2-}$	16	18	gain 2	$2-$

# Aufbau Diagram





Bohr  
exact  
orbits

QMM  
probability  
orbitals

# Test Review

Ch. 4 p. 122-123 #34, 39-41, 44-57, 58, 60, 63-64,  
65, 71-73

Ch. 5 p. 149-150 #23-39

Ch. 6 p. 181-182 #24, 26-35