

AP Chem Summer Review Guide

- List the three subatomic particles and their charges:

- _____
- _____
- _____

- Fill out the following table:

Symbol	Atomic #	Atomic Mass	Protons	Neutrons	Electrons
K					
Ca					
Br					
Ba					

- Fill in the following table:

Orbital Type	Number of Orbitals
S	
	3
D	
	7

- Draw the orbital diagram for Si:
- Draw the orbital diagram for Gallium:
- Draw the lewis dot structures for the following elements:

Po	Fr	Tl
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- Write out the electron configuration and the abbreviated electron configuration for Ru:

- Write out the electron configuration and the abbreviated electron configuration for Al.

- Write out the electron configuration and the abbreviated electron configuration for As.

<p>CO_2</p> <p>Name:</p> <p>Valence electrons:</p> <p>Shape:</p>	<p>CCl_4</p> <p>Name:</p> <p>Valence electrons:</p> <p>Shape:</p>
<p>OF_2</p> <p>Name:</p> <p>Valence electrons:</p> <p>Shape:</p>	<p>SCl_2</p> <p>Name:</p> <p>Valence electrons:</p> <p>Shape:</p>
<p>NCl_3</p> <p>Name:</p> <p>Valence electrons:</p> <p>Shape:</p>	<p>H_2S</p> <p>Name:</p> <p>Valence electrons:</p> <p>Shape:</p>

*** Make sure you are reviewing your notes! This is why I wanted you to take them :) Do not copy! The purpose of this is to help you remember what we learned last semester*

- Naming ionic and molecular compounds → first determine the type of bond so you can use the correct rules for naming/formula writing:

- Iron (III) oxide _____
- Sodium phosphate _____
- Dinitrogen pentoxide _____
- Sulfur trioxide _____
- Magnesium bromide _____
- Carbon monoxide _____
- Ammonium sulfide _____
- Copper (II) carbonate _____
- Carbon tetrachloride _____
- Magnesium sulfide _____
- LiCO_3 _____
- NO_2 _____
- CuBr _____
- $(\text{NH}_4)\text{Cl}$ _____
- $\text{K}_3(\text{PO}_4)$ _____
- NO_2 _____
- N_2O_4 _____