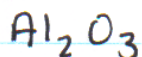
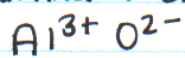
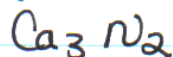
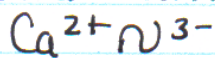


1. aluminum oxide



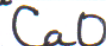
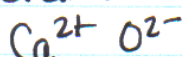
2. Calcium nitride



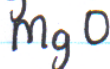
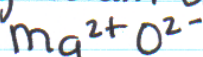
3. NaF

sodium fluoride

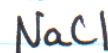
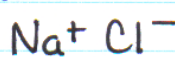
4. calcium oxide



5. magnesium oxide



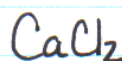
6. sodium chloride



7. AgI

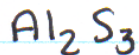
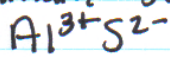
silver iodide

8.



calcium chloride

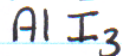
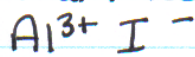
9. aluminum sulfide



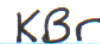
10. Cs₂O

cesium oxide

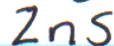
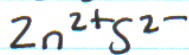
11. aluminum iodide



12. potassium bromide

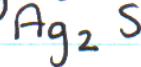
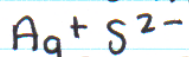


13. zinc sulfide

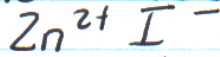


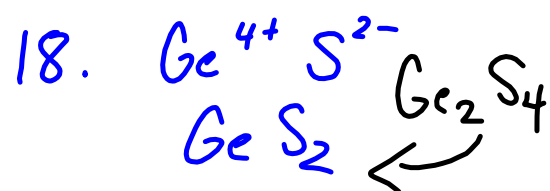
~~14. CaH₂~~

15. silver sulfide

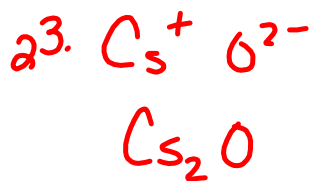


16. Zinc iodide





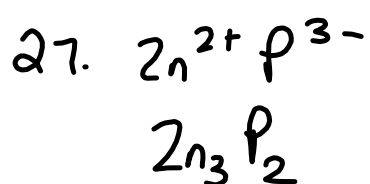
19. potassium oxide



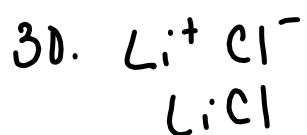
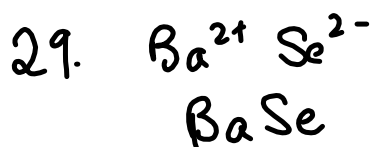
24. silver bromide

~~25. Mg~~

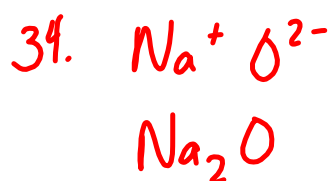
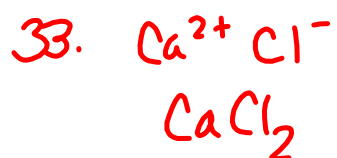




28. zinc iodide

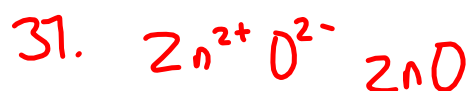


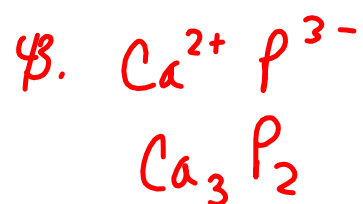
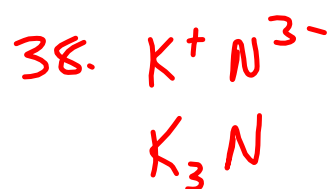
32. magnesium chloride



35. strontium oxide

36. silver chloride





39. barium chloride

40. silver oxide



44. barium oxide

QUIZ

10 Minutes



oxygen----- oxide
nitrogen----- nitride
sulfur----- sulfide
bromine---- bromide
chlorine---- chloride
iodine---- iodide
phosphorus---phosphide
fluorine---fluoride

Element	Symbol	Charge[s]
a) chromium	Cr	3+, 2+
b) cadmium	Cd	2+
c) lead	Pb	2+, 4+
d) iron	Fe	3+, 2+
e) nickel	Ni	2+, 3+
f) copper	Cu	2+, 1+

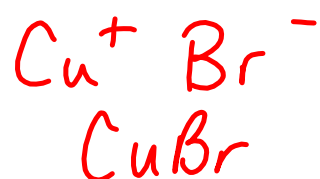
MULTI-Valent ELEMENTS {multi-ion}

- Some metals are able to form more than one kind of ion.
- EXAMPLES: Cu^{+1} or Cu^{+2}
- These compounds are named in the same way as other ionic compounds, except that a Roman numeral is added in round brackets after the metal to indicate its ionic charge.

Roman Numerals

I	- 1 ⁺
II	- 2 ⁺
III	- 3 ⁺
IV	- 4 ⁺
V	- 5 ⁺
VI	- 6 ⁺
VII	- 7 ⁺

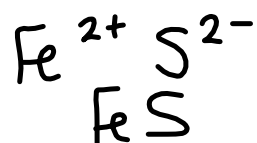
A. copper (I) bromide



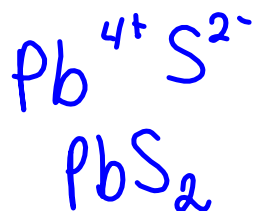
B. copper (II) bromide



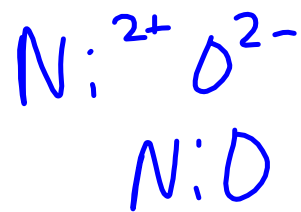
C. iron (II) sulfide



D. lead (IV) sulfide



E. nickel (II) oxide



1. What is an ionic compound made up of?

positive ion plus negative ion

2. What is an ion?

charged particle, unequal protons and electrons

3. Name

Chemical formula

a. potassium chloride

$K^+ Cl^-$

KCl

b. scandium nitride

ScN

c. lead (IV) phosphide

$Pb^{4+} P^{3-}$

$Pb_3 P_4$

d. silver phosphide

$Ag_3 P$

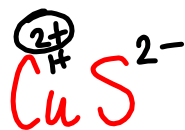
e. calcium fluoride

$Ca^{2+} F^-$

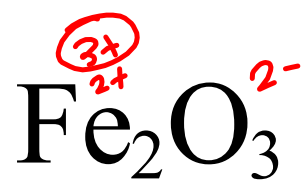
CaF_2

Writing names for multivalent elements

1. Determine the charge that is being used



copper(II) sulfide

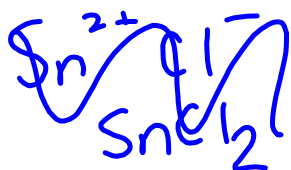


iron (III) oxide

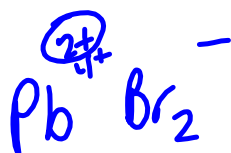
Write the names for the following:



tin(II) chloride



tin(IV) chloride



lead(II) bromide

Name	Formula
a) Chromium (III) oxide $\text{Cr}^{3+} \text{O}^{2-}$	Cr_2O_3
b) cobalt (II) phosphide $\text{Co}^{2+} \text{P}^{3-}$	Co_3P_2
c) zirconium nitride $\text{Zr}^{4+} \text{N}^{3-}$	Zr_3N_4
d) titanium(III) oxide $\text{Ti}^{3+} \text{O}^{2-}$	Ti_2O_3