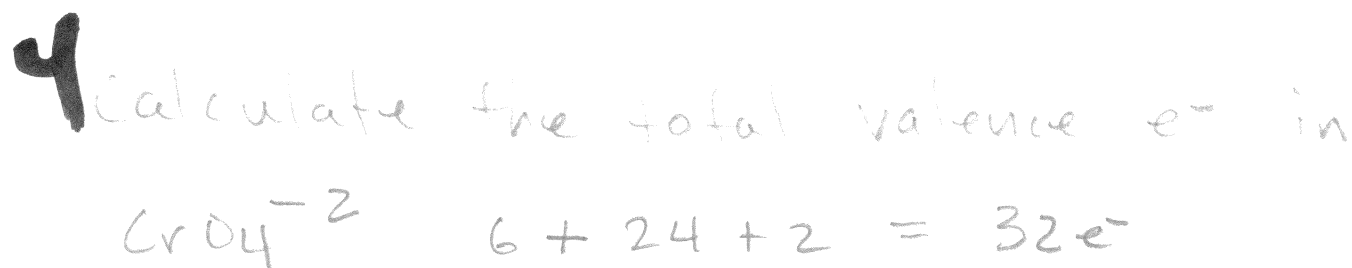
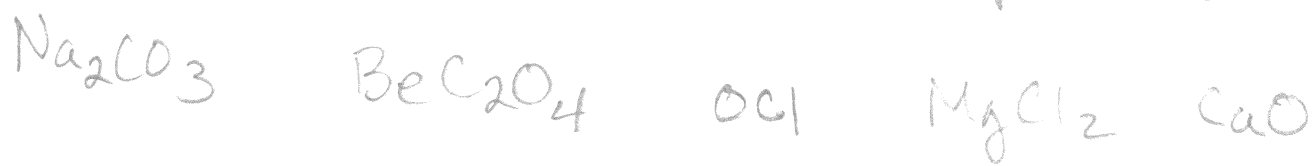
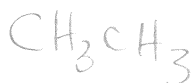


3 Identify Molecular compound:



5 Select the molecule with one double bond:
 PCl_3 OCl SeBr_2 CS CN

Draw the following
Formulas



Which pair of elements is
closest in size?

Cu, Ga, Se, Ge

Ga, Ge

Cu, Se

From which element is it
easier to remove an e^- ?

S

Te

8

chem 7 white Board

(1) ~~100~~ ~~51~~ 9
Formula

barium sulfate — BaSO_4

hydrobromic acid — HBr

nitric acid — HNO_3

perchloric acid HClO_4

lead(II) acetate — $\text{Pb}(\text{C}_2\text{H}_3\text{O}_2)_2$

Silver nitrate — AgNO_3

copper (II) carbonate

→ CuCO_3

(2) Name ~~write Formula~~

1 NH_4Cl ammonium chloride

~~51~~ $\text{Cu}(\text{OH})_2$ copper (II) hydroxide

Fe_2S_3 iron(III) Sulfide

$\text{Sn}_3(\text{PO}_4)_2$ tin (II) phosphate

AlPO_4 aluminum phosphate

~~4~~ ~~12~~ ~~25~~ ~~26~~ ~~36~~ ~~7~~ 10
9 Which of the following atoms
require $2e^-$ to fill outer shell?

~~11~~ ~~15~~ Ca, Se, Si, Cl, Ar

~~7~~ ~~64~~ ~~27~~ ~~2~~ 11
10 Which pair of elements is closest
in size

~~14~~ ~~13~~ ~~12~~ ~~11~~ ~~10~~ ~~9~~ ~~8~~ ~~7~~ ~~6~~ ~~5~~ ~~4~~ ~~3~~ ~~2~~ ~~1~~
12 Ge, F, H, Cu, Sc, Ti

~~102~~

A compound with $EFCH_2$ was found to have a Mm of 84. Find the chemical formula.



Q) write the EC of outer valence of:



~~103~~

Q) write EC of outer valence of:



12

~~24~~ Name the polyanions: ~~25~~

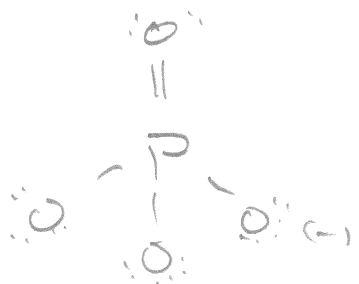
~~13~~ ~~44~~



chlorate

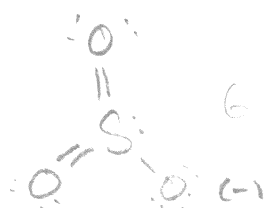
~~45~~

~~14~~



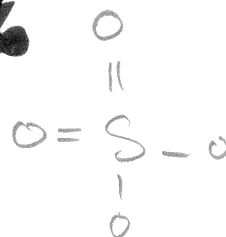
phosphate

~~15~~



SO_3^{-2}
 $6 + 3(6) + 2 = 26$
Sulfite

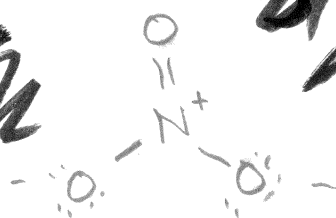
~~16~~



sulfate

~~17~~

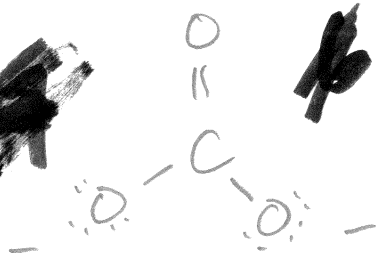
~~18~~ ~~15~~



nitrate

~~19~~

~~20~~



carbonate

16

Draw LF



$$5 + 6 + 1 = 12e^-$$



17 which compound is most ionic?



18 Select the compound with one unshared pair of e^- .



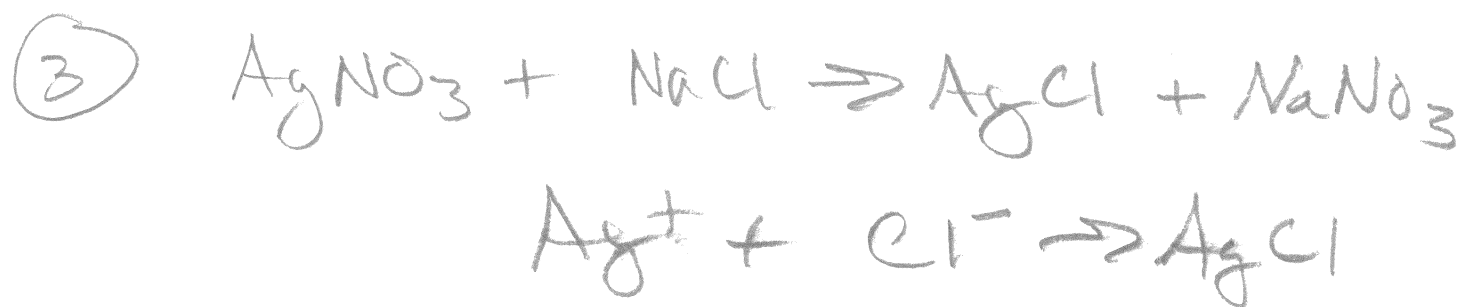
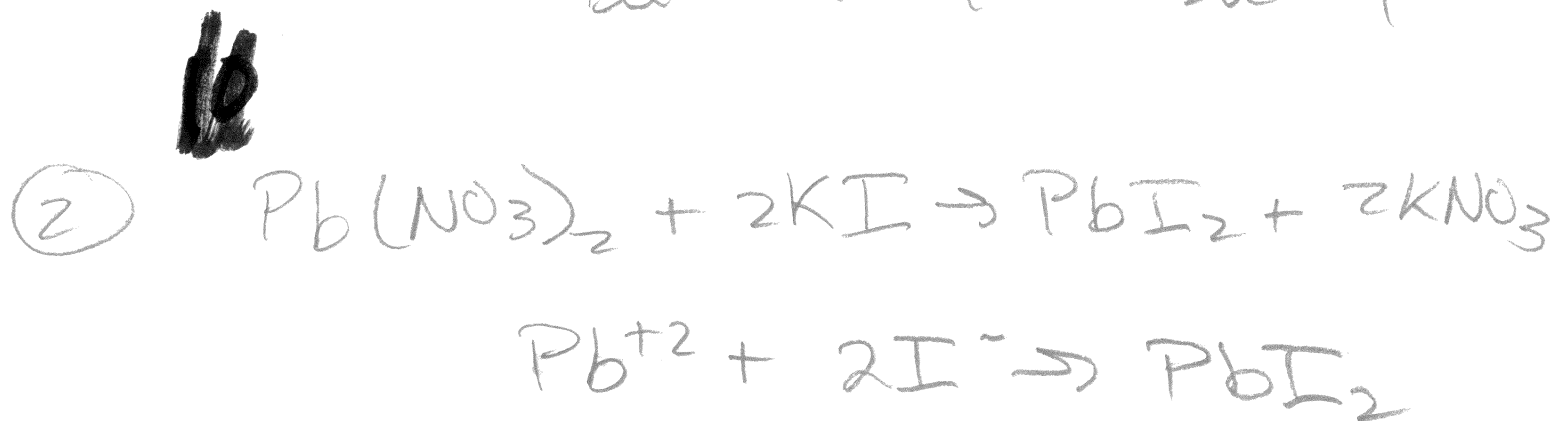
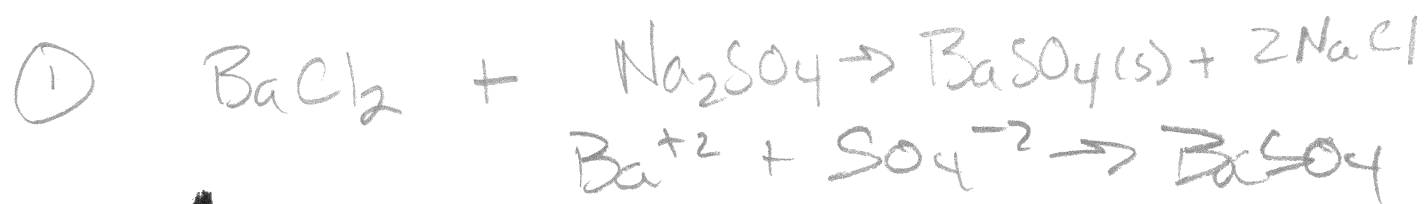
9/19

write the ionization equations

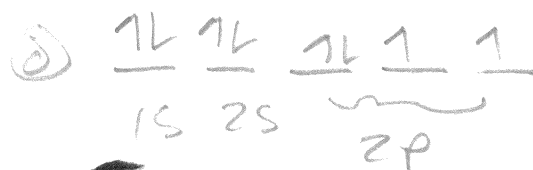
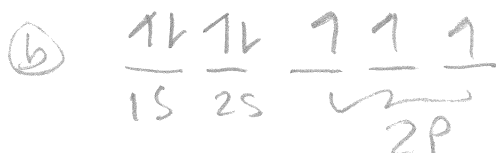
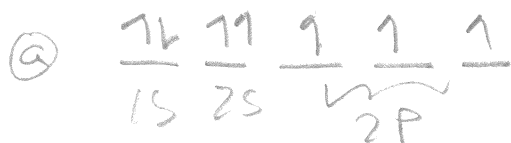


21 4 20

write the net ionic equation
for:



23 Indicate the OD that is allowed or not allowed by Pauli Exclusion principle.



As

~~21~~ 21

Use arrow + words to order Se, S, As in increasing at. radius.

Small $\xrightarrow{\text{S Se As}}$ big

22

25 Arrows + words to order following group in increasing IE.

Ar, Na, Cl, Al

Na Al Cl Ar
Small $\xrightarrow{}$ big
low high

23 Calculate total e^- in O^{2-}

10

24 Calculate total e^- in Ba^{+2}

54

25 Write the outer valence EC of Sr

$5s^2$

26 Calc the Z_{eff} of Sc's valence e^- .

$$Z_{eff} = 21 - 18 = +3$$

27 Select molecule with 4 unshared pairs of e^- .

O_3

NH_3

S_2

CN^-

BH_3



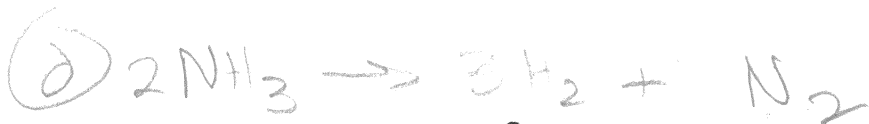
~~20~~ Identify the element most likely to form a covalent bond with O. 28

Na Cu Ti N Zn

~~24~~ Identify the element that will form an ionic bond with O. 29

P Se Br S K

~~20~~ Identify the combustion equation.



~~22~~ Write EC of valence of each ion:

~~23~~ Na^+ $2s^2 2p^6$

Cl^- $3s^2 3p^6$

S^{2-} $3s^2 3p^6$

Mg^{+2} $2s^2 2p^6$

30