

DIAZONES H, N, O, F, Cl, Br, I

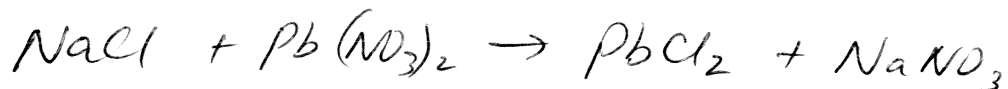
M
44

Worksheet: Word Equations

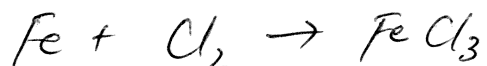
Name _____

Substitute symbols and formulas for words, then balance each equation.

1. sodium chloride + lead (II) nitrate → lead (II) chloride + sodium nitrate



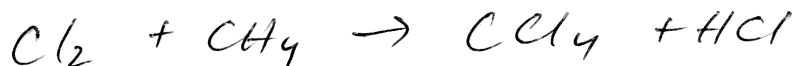
2. iron + chlorine → iron (III) chloride



3. barium + water → barium hydroxide + hydrogen



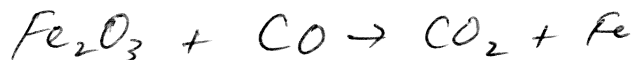
4. When chlorine gas reacts with methane, carbon tetrachloride and hydrogen chloride are produced.



5. When sodium oxide is added to water, sodium hydroxide is produced.



6. In a blast furnace, iron (III) oxide and carbon monoxide gas produce carbon dioxide gas and iron.



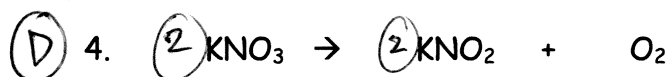
7. Iodine crystals react with chlorine gas to produce iodine trichloride.



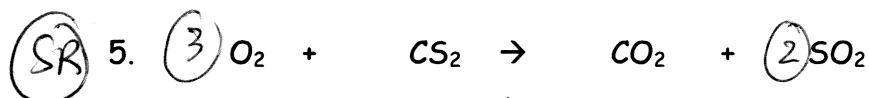
DIATOMICS = _____ "GAS"

(M) (44)

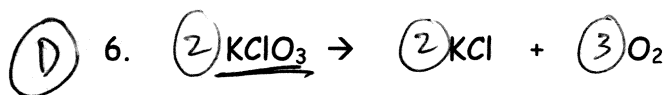
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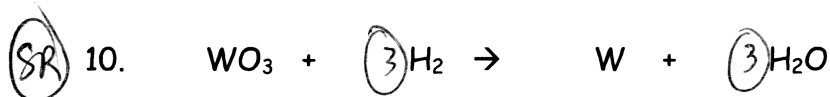
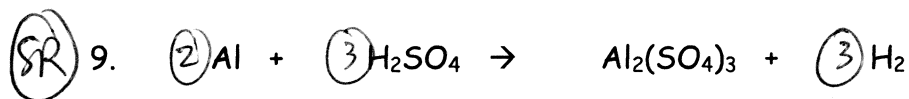
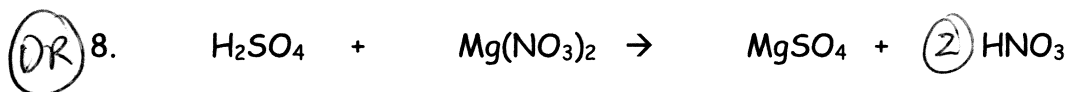
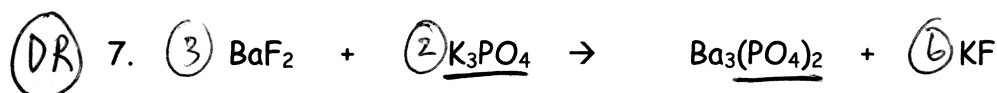
POTASSIUM NITRATE DECOMPOSES TO POTASSIUM NITRITE & OXYGEN GAS



OXYGEN GAS MIXED w/ CARBON DISULFIDE PRODUCES
CARBON DIOXIDE & SULFUR DIOXIDE





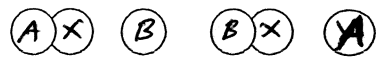

POTASSIUM CHLORATE DECOMPOSES



Chemical Reactions

Name _____

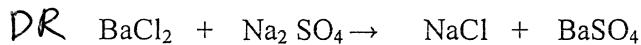
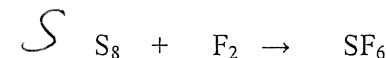
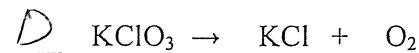
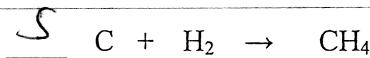
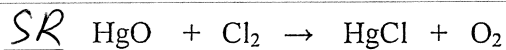
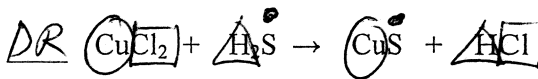
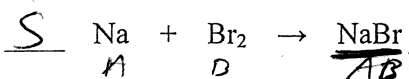
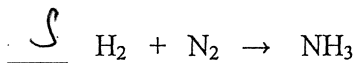
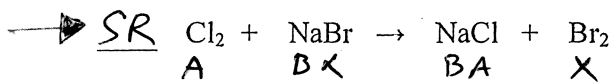
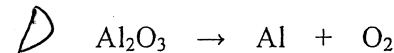
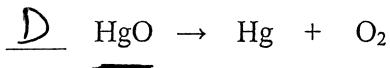
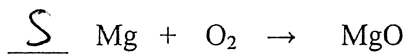
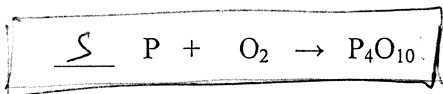
1. Watch the video and then complete the chart.

Type of Reaction	Definition	★ Equation
Synthesis	COMBINE 2 SMALL THINGS TO CREATE 1 LARGE PRODUCT	$A + B \rightarrow AB$ 
Decomposition		$AB \rightarrow A + B$ 
Single Replacement		$A + BX \rightarrow AX + B$ 
Double Replacement		$AX + BY \rightarrow AY + BX$ 

Colors: A = Red, B = Blue, C = Green, D = Yellow

2. Use colored pencils to circle the common atoms or compounds in each equation to help you determine the type of reaction it illustrates. Use the code below to classify each reaction.

S = Synthesis D = Decomposition SR = Single Replacement DR = Double Replacement



Balancing Chemical Equations

- Write down the different types of atoms there are in each COMPOUND.
- Write down the number of each different ATOM in each COMPOUND. } ATOM INVENTORY

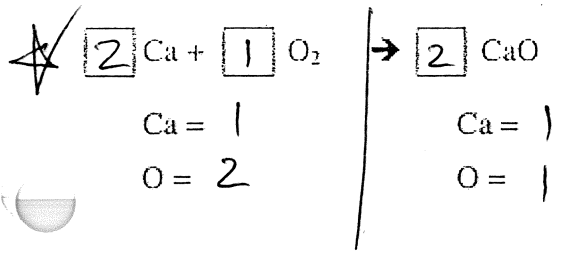
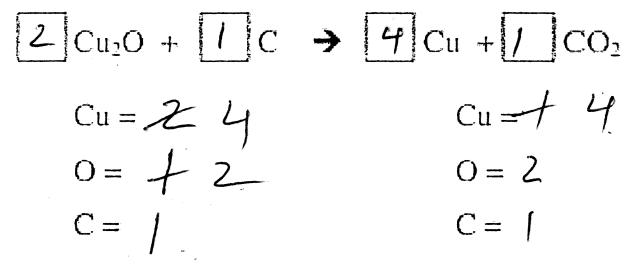
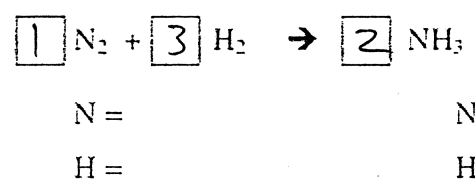
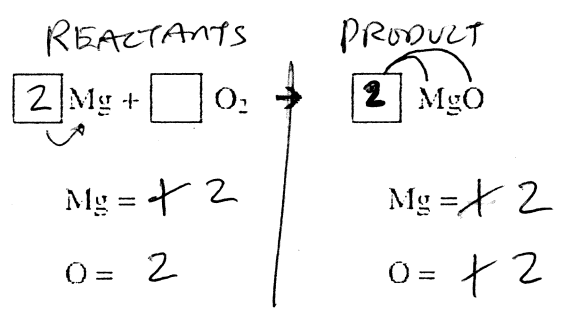
Cu	C: 1 O: 1	(AsO ₃) ₂	As: 2 O: 6
P ₂ O ₅	P: 2 O: 5	(PO ₄) ₃	P: 3 O: 12
CH ₃ COO		(C ₂ O ₄) ₅	C: O:
NH ₄		(CO ₃) ₃ N ₂	C: O: N:
Ca ₃ N ₂		(NH ₄) ₂ O	N: H: O:

1. The law of CONSERVATION states that: MATTER CANNOT BE CREATED OR DESTROYED

This is the reason for BALANCE EQNS.

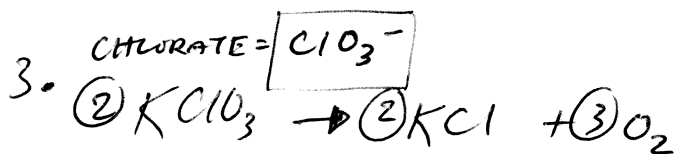
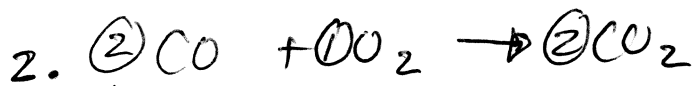
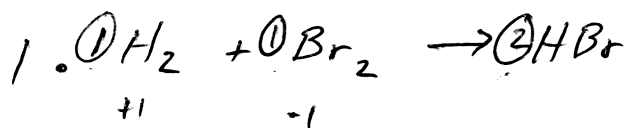
Steps to balancing equations

- Determine the number of atoms for each ELEMENT (atom inventory)
- Pick an ELEMENT that is not equal on BOTH sides of the equation.
- Add a COEFFICIENT in front of the formula with that element and adjust your inventory.
- Continue adding or changing coefficients to get the SAME number of atoms of each element on each side.

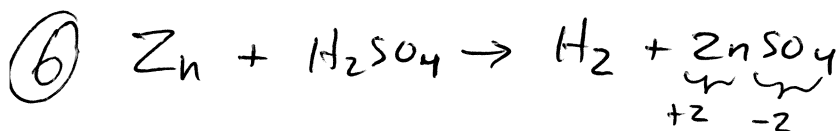
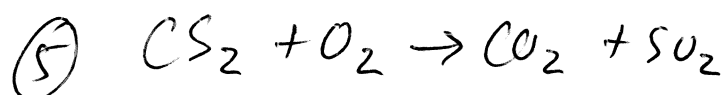
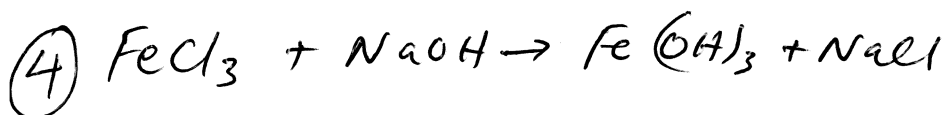


Pg 279 #1-3

①



Pg 282 #4-6 (Zn = +2)



- ① ID TYPE OF RXN
- Synthesis
 - Decomposition
 - Single/Double replacement
 - Combustion

Quiz topics

② Balance EQNS

③ Write CHEM EQNS

HW

Pg 283	7-10, 13
Pg 285	14-17