

**SET #1**

Questions #1 - 8

Answer #1

Strontium Oxide

Answer #2

421.61 g/mol

Answer #3

Sea of electrons, delocalized electrons etc.

Answer #4

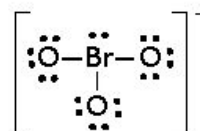
Covalent bond

Answer #52 mol O<sub>2</sub> : 1 mol CH<sub>4</sub>Answer #6Hydrogen bonding  
Remember H-NOF!Answer #7Metallic < Ionic Lattice  
< Network CovalentAnswer#8Cu(SO<sub>4</sub>)<sub>2</sub>**SET #2**

Questions #9 - 16

Answer #9

Single replacement/single displacement

Answer #10Cl<sub>2</sub>Answer #11Answer #12

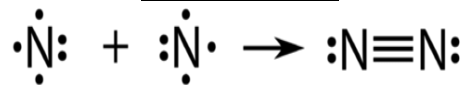
tetrahedral

Answer #13

68.15 g/mol

Answer #14

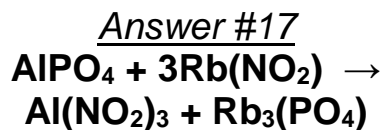
trigonal pyramidal

Answer #15Answer #16

Combustion!

**SET #3**

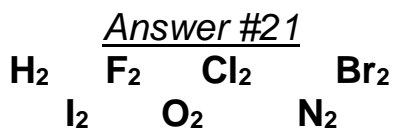
Questions #17 - 25



Answer #18  
**Unequally!**

Answer #19  
**10 mol ZnO!**  
**Same molar ratio!**

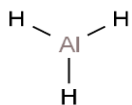
Answer #20  
**31.1g ZnO**



Answer #22  
**77.98 g/mol**

Answer #23  
**L of A  $\rightarrow$  mol A  $\rightarrow$  mol B  $\rightarrow$  L of B**  
**76L H<sub>2</sub>O**

Answer #24



Answer #25  
**2 mole TNT : 7 mole CO**

**SET #4**

Questions #26 - 33

Answer #26  
 **$\text{Na}_2\text{CO}_3$**

Answer #27  
**106g/mol**

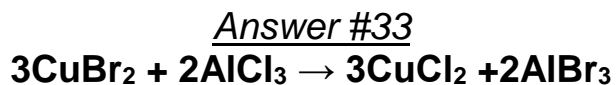
Answer #28  
 **$\text{Fe}_2(\text{SO}_4)_3 =$**   
**400.1 g/mole**

Answer #29  
**0.111 moles**  
 **$\text{Fe}_2(\text{SO}_4)_3$**

Answer #30  
**1087.7g**  
**KCl**

Answer #31  
**1592.68 g**  
 **$\text{Fe}_2(\text{CO}_3)_3$**

Answer #32  
**Double displacement.**



**SET #5**

Questions #34 - 41

Answer #34  
0.103 moles

Answer #35  
1 mole  $\text{Fe}_2(\text{SO}_4)_3 =$   
3 moles  $\text{Na}_2\text{SO}_4$

Answer #36  
30 moles  $\text{Na}_2\text{SO}_4$

Answer #37  
 $2\text{H}_2 + \text{O}_2 \rightarrow 2\text{H}_2\text{O}$   
0.94 moles water

- Answer #38
1. Production of heat and light
  2. Production of a gas
  3. Formation of a precipitate
  4. Change in color

Answer #39  
 $2\text{Na} + \text{Cl}_2 \rightarrow 2\text{NaCl}$   
1 mole  $\text{Cl}_2$

Answer #40  
 $2\text{NaCl} + \text{Ba} \rightarrow \text{BaCl}_2 + 2\text{Na}$   
39.32 g Na

Answer #41  
19.52L  
 $\text{F}_2$

**SET #6**

Questions #42 - 49

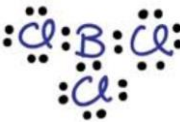
Answer #42  
0.99g

Answer #43  
8.2 mol

Answer #44  
 $1.23 \times 10^{24}$   
molecules

Answer #45  
 $5.44 \times 10^{-5}$   
mol B

Answer #46



Trigonal Planar

Answer #47  
Valence  
electrons

Answer #48  
Gain 3 electrons

Answer #49  
26 ve-

**SET #7**

Questions #50 - 58

Answer #50  
Ionic, covalent,  
covalent, covalent,  
ionic

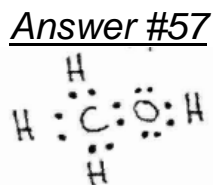
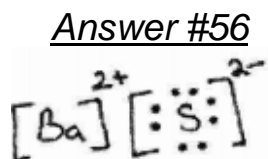
Answer #51  
Mono, di, tri, tetra,  
penta, hexa, hepta,  
octa, nona, deca

Answer #52  
Dicarbon  
hexahydride

Answer #53  
Silver oxide

Answer #54  
Copper (III) Nitrite

Answer #55  
Sulfur hexoxide



Answer #58  
0 lone pairs

**SET #8**

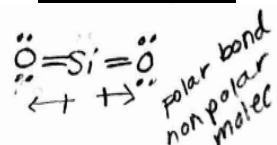
Questions #59 - 66

Answer #59  
1 lone pair

Answer #60



Answer #61



Answer #62

CHCl<sub>3</sub> is more polar because greater electroneg. difference between atoms than in CHBr<sub>3</sub>

Answer #63

London forces

Answer #64

Dipole-Dipole  
(yes H is there, but no H-NOF:)

Answer #65

Network Covalent

Answer #66

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