Bonding Sit Down Practice

1. Name ALL the bonds in each of these compounds

HBr	$AlCl_3$	CO_2
F_2	O_2	Fe

2. Name ALL the bonds in each of these compounds

C_2H_6	C_2H_4	C_2H_2

3. Match the alloys to their component elements.

Sterling silver	Zinc + Copper
Brass	Carbon + Iron
Cast iron	Chromium + Iron
Stainless steel	Copper + Silver

4. Intermolecular bonding is not inside of compounds, it's between particles (either atoms or molecules).

List IMF weakest to strongest

Match substances to the IMF they exhibit

F_2	dipole attraction
H_2O	electron dispersion
PCl_3	hydrogen bonding

5. How does metallic bonding explain these metallic properties?

Metals are malleable

Metals are ductile

Metals can conduct electricity

6. Name ALL the bonds in each of these substances.

CH_4	$AlCl_3$	NH_3
NBr_3	O_3	MgO

7A. Rank these bonds from most polar to least polar.		
H–I	H–Cl	H–O

7B. Rank these bonds from most polar to least polar.		
O–F	I–I	C=O

8. Are these molecules polar or nonpolar? (do they have radial symmetry?)		
CO_2	CH_4	HCl
H_2O	C_2H_6	BF_3

9. For each pair, circle the substance with the higher boiling point?	I_2 Br_2	NH_3 CCl_4
	H_2O OF_2	SCl_2 $SiCl_2$

10. Name all the bonds in these compound or substances.

N_2	O_2	Br_2
HCN	$CuSO_4$	H_2O

11. Something special about the bonding happens in each of these boxes, what might that be?

CO	O_3	PCl_5
Pb	BCl_3	Diamond, Graphite, Bucky balls

12. Name all the bonds found in these substances.

KBr	
$NaNO_3$	
NBr_3	
C_2F_4	
AsH_3	
NaOH	