

## Bonding Sit Down Practice

1. Name ALL the bonds in each of these compounds

HBr	AlCl <sub>3</sub>	CO <sub>2</sub>
F <sub>2</sub>	O <sub>2</sub>	Fe

2. Name ALL the bonds in each of these compounds

C <sub>2</sub> H <sub>6</sub>	C <sub>2</sub> H <sub>4</sub>	C <sub>2</sub> H <sub>2</sub>
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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 <sub>2</sub> dipole attraction
	H <sub>2</sub> O electron dispersion
	PCl <sub>3</sub> 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.



7A. Rank these bonds from most polar to least polar.



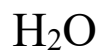
7B. Rank these bonds from most polar to least polar.



8. Are these molecules polar or nonpolar? (do they have radial symmetry?)



9. For each pair, circle the substance with the higher boiling point?



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

$\text{N}_2$	$\text{O}_2$	$\text{Br}_2$
$\text{HCN}$	$\text{CuSO}_4$	$\text{H}_2\text{O}$

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

$\text{CO}$	$\text{O}_3$	$\text{PCl}_5$
$\text{Pb}$	$\text{BCl}_3$	Diamond, Graphite, Bucky balls

12. Name all the bonds found in these substances.

$\text{KBr}$	
$\text{NaNO}_3$	
$\text{NBr}_3$	
$\text{C}_2\text{F}_4$	
$\text{AsH}_3$	
$\text{NaOH}$	