

Chemical Bonding Practice

Name _____

Using your periodic table

1. Identify the elements in each formula.
2. Categorize them as "metals" or "non-metals".
3. Determine the type of bond for each compound.

Formula	Metals	Non-metals	Type of Bond
HF		Hydrogen Fluorine	Covalent
NaCl	Sodium	Chlorine	Ionic
C ₄ H ₁₀			
Al ₂ O ₃			
CBr ₄			
Na ₂ S			
Sr ₃ N ₂			
H ₂ S			
BaF ₂			
NO ₂			

Reminder: Covalent bonds are form between nonmetals.

Ionic bonds are formed between a metal and nonmetal.

Metals, Nonmetals, and Metalloids

H																	He																												
Li	Be									B	C	N	O	F	Ne																														
Na	Mg									Al	Si	P	S	Cl	Ar																														
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr																												
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe																												
Cs	Ba	La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn																												
Fr	Ra	Ac	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Uub	Uuq	Uup	Uuh	Uus	Uuo																													
<table border="1" style="border-collapse: collapse; text-align: center; width: 100%;"><tr><td>Ce</td><td>Pr</td><td>Nd</td><td>Pm</td><td>Sm</td><td>Eu</td><td>Gd</td><td>Tb</td><td>Dy</td><td>Ho</td><td>Er</td><td>Tm</td><td>Yb</td><td>Lu</td></tr><tr><td>Th</td><td>Pa</td><td>U</td><td>Np</td><td>Pu</td><td>Am</td><td>Cm</td><td>Bk</td><td>Cf</td><td>Es</td><td>Fm</td><td>Md</td><td>No</td><td>Lr</td></tr></table>																		Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr
Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu																																
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metals metalloids nonmetals