

11) Draw a picture of what a sodium chloride lattice looks like.

12) The following is a table of Pauling electronegativity values. We can use these values to determine if a bond is ionic, covalent, or polar covalent.

2.1 H																	
1.0 Li	1.5 Be											2.0 B	2.5 C	3.0 N	3.5 O	4.0 F	
0.9 Na	1.2 Mg											1.5 Al	1.8 Si	2.1 P	2.5 S	3.0 Cl	
0.8 K	1.0 Ca	1.3 Sc	1.5 Ti	1.6 V	1.6 Cr	1.5 Mn	1.8 Fe	1.8 Co	1.8 Ni	1.9 Cu	1.6 Zn	1.6 Ga	1.8 Ge	2.0 As	2.4 Se	2.8 Br	
0.8 Rb	1.0 Sr	1.2 Y	1.4 Zr	1.6 Nb	1.8 Mo	1.9 Tc	2.2 Ru	2.2 Rh	2.2 Pd	1.9 Ag	1.7 Cd	1.7 In	1.8 Sn	1.9 Sb	2.1 Te	2.5 I	
0.7 Cs	0.9 Ba		1.3 Hf	1.5 Ta	1.7 W	1.9 Re	2.2 Os	2.2 Ir	2.2 Pt	2.4 Au	1.9 Hg	1.8 Tl	1.8 Pb	1.9 Bi	2.0 Po	2.2 At	
0.7 Fr	0.9 Ra																

Calculate the electronegativity difference for each species and identify the type of bond that forms in the species.

Compound	Electronegativity Difference	Type of Bond
a. HCl	_____	_____
b. MgF ₂	_____	_____
c. CO ₂	_____	_____
d. Br ₂	_____	_____
e. CO ₂	_____	_____
a. HF	_____	_____
b. NaF	_____	_____
c. IF ₇	_____	_____
d. O ₂	_____	_____
e. NO ₂	_____	_____