Dougherty Valley HS Chemistry
Bonding and Structure – IMFs

Worksheet #14

Name: **Period:** **Seat#:**

Indicate the **strongest** IMF holding together crystals of the following:

		Molecular Crystal			**Metal**	**Ionic Crystal**	**Network Solid**
		London forces	Dipole-dipole attractions	Hydrogen Bonds	Metallic Bonds	Ionic Bonds	Covalent Bonds
1.	NH_3						
2.	Kr						
3.	HCl						
4.	F_2						
5.	$KMnO_4$						
6.	NaCl						
7.	SO_2						
8.	CO_2						
9.	C_3H_8						
10.	CH_4						
11.	CH_3Cl						
12.	HF						
13.	C_6H_6						
14.	NO						
15.	H_2SO_4						
16.	WC						
17.	Si						
18.	SiO_2						
19.	$C_{(graphite)}$						
20.	N_2						
21.	CH_3OH						
22.	Ag						
23.	$(C_2H_5)_2NH$						
24.	NaOH						
25.	Al						
26.	PCl_3						

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		Molecular Crystal			Metal	Ionic Crystal	Network Solid
		London forces	Dipole-dipole attractions	Hydrogen Bonds	Metallic Bonds	Ionic Bonds	Covalent Bonds
27.	XeF_4						
28.	He						
29.	Na						
30.	CO						
31.	Ar						
32.	$Ba(OH)_2$						
33.	O_2						
34.	H_2O						
35.	NH_4Cl						
36.	Hg						
37.	P_4						
38.	HCN						
39.	CaO						
40.	N_2H_2						
41.	H_2						
42.	Pb						
43.	XeF_2						
44.	SF_4						
45.	SiC						
46.	Si_4H_{10}						
47.	PH_3						
48.	SiH_4						
49.	H_2Se						
50.	C_2H_2						
51.	I_2						
52.	Cu						
53.	AsH_3						
54.	K_2S						