

13 • IMF's, Liquids, & Solids

I M F ' S I N S O L I D S

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			X			
2.	Kr	X					
3.	HCl		X				
4.	F ₂	X					
5.	KMnO ₄					X	
6.	NaCl					X	
7.	SO ₂		X				
8.	CO ₂	X					
9.	C ₃ H ₈	X					
10.	CH ₄	X					
11.	CH ₃ Cl		X				
12.	HF			X			
13.	C ₆ H ₆	X					
14.	NO		X				
15.	H ₂ SO ₄			X			
16.	WC						X
17.	Si						X
18.	SiO ₂						X
19.	C _(graphite)						X
20.	N ₂	X					
21.	CH ₃ OH			X			
22.	Ag				X		
23.	(C ₂ H ₅) ₂ NH			X			
24.	NaOH					X	
25.	Al				X		
26.	PCl ₃		X				
27.	XeF ₄	X					

NOTES:

more on the back...

		Molecular Crystal			Metal	Ionic Crystal	Network Solid
		London forces	Dipole-dipole attractions	Hydrogen Bonds	Metallic Bonds	Ionic Bonds	Covalent Bonds
28.	He	X					
29.	Na				X		
30.	CO		X				
31.	Ar	X					
32.	Ba(OH) ₂					X	
33.	O ₂	X					
34.	H ₂ O			X			
35.	NH ₄ Cl					X	
36.	Hg				X		
37.	P ₄	X					
38.	HCN		X				
39.	CaO					X	
40.	N ₂ H ₂			X			
41.	H ₂	X					
42.	Pb				X		
43.	XeF ₂	X					
44.	SF ₄		X				
45.	SiC						X
46.	Si ₄ H ₁₀	X					
47.	PH ₃		X				
48.	SiH ₄	X					
49.	H ₂ Se		X				
50.	C ₂ H ₂	X					
51.	I ₂	X					
52.	Cu				X		
53.	AsH ₃		X				
54.	K ₂ S					X	

NOTES: