

LECTURE NOTES SUPPLEMENT

INTERPARTICLE FORCES SUMMARY for SOLIDS and/or LIQUIDSref. *Chemistry, 7th ed.*, Zumdahl & Zumdahl; sections 10.1-10.7

	Type of Substance		Examples	Particles	Interparticle Forces
	sol.	liq.			
Elements	metals	X	Hg, Fe, Ti		
	Cdiamond or Si(s) *	X	<i>Cdiamond</i> or <i>Si(s) only</i> *		
	diatomic non-metals *	X	H ₂ , N ₂ , F ₂ , O ₂ , I ₂ , Cl ₂ & Br ₂		
	<i>all other non-metals</i> *	X	He, Ne, Ar...		
Compounds	ionic	X	NaCl, FeSO ₄ , TiO ₂		
	network solid containing Si or C	X	SiO ₂ or SiC <i>only</i> *		
	molecular	X	NH ₃ , HF, H ₂ O, CH ₃ CH ₂ OH		
		X	CO, PF ₃ , HCl		
		X	CH ₄ , CO ₂ , SF ₆		

* Note that there are other examples and/or exceptions to this, but these are the rules we will use in CHM102.