

Unit 4 Covalent bonding - Reading assignment 1 - 16.1 pg 437-451 - Ques. 1-12

K	T	U
✓ ionic compound - metal/nonmetal ✓ molecular compound - 2 or more elements covalently bonded ✓ diatomic elements - $H_2, N_2, O_2, F_2, Cl_2, Br_2, I_2$ ✓ polyatomic ions - multiple atoms covalently bonded that gain or lose e^-	← single covalent bond - share 1 pair of e^- ← electron dot formulas - Ex. $H-\ddot{O}-H$ → shows bonds and lone pairs ← double covalent bond - share 2 pairs of e^- ← triple covalent bond - share 3 pairs of e^- - Common covalent compounds - review	- structural formula ← unshared pairs ← coordinate covalent bond ← bond dissociation energy - resonance structures? - exceptions to the octet rule - diamagnetic? - paramagnetic? - Ask!

structural formula - structures showing bonds and lone pairs -

unshared pairs - e^- that fill valence but not shared (a.k.a. - lone pairs)

coordinate cov. - covalent bond where one atom donates 2 e^- and the other doesn't donate any e^- → Ex $H-\overset{H}{\underset{H}{\text{N}}}^+H$

bond dissociation energy - energy needed to break a covalent bond

Questions - 16.1 1-12.

1. ~~~~~

2. ~~~~~