9/2019			
	Balancing equations!		
9	-need same # + type of atoms on each	cid.	
	-need same # + type of atoms on each - change COEFFICIENB not subscrip	b /	•
	Suescrip	13.	
	C_2H_6 $+3\frac{1}{2}O_2$ \longrightarrow 2 CO_2 $+3H_2O_2$		
	C: 2 C: *2		
	H: 6 H: 26	/x 2	_
	0: 27		
	2C2H6 +702 -> 4(02 + 6H20 *		
	* lowest set of whole # coefficients *		
		(0,	HO
		(0,	H20
	C3H8 +502 -> 3CO2 + 4H2O		H2U H2U
	C: 3 (: * 3		
	H: 8 H: X 8		
	0: ×10		
	2 Kao, ->2 Ka + 302		
	K: *2 K: *2		
	C1: *2 9: *2		

0: \$6

0: 36

2C2H6 + 702 -> 4002 + 6H20 earlier! coefficients are the ratios! (molar ratios) 2 molecules C2Hz: 7 molecules O2 ×3 (6 " — ": 21 " — ") 6.022×10²³ 2×6.022×10²³ C2Hz: 7×6.022×10²³ O2 2 mol C2Hz: 7 mol O2 (molar rahos!) 2 mol C2H6=6 mol H2O as a 7 mol O2 = 4 mol (O2 conversion Q: How many not (Oz will we make from 7-2 mol Oz? 7.2 mol Oz x 4 mol (Oz = 4.1 mol (Oz (25.f.) Q: How many mol H2O are made from 1-8 mol C2H6? 2mol (2Ho= 6mol H20 1.8 mol 62H6 = 5.4 mol H20 2 mol 62H6

More useful to calculate masses!
ex: 2C2H6+702 -> 4(02+6H20
Q: How many mol H2O do we make from 454g C2H6?
454g C2H6?
2C2H6 + 702 -> 4002 + 6H20
3 mol C2Hc @ coefficients. > ? mol H20
(1) molar
mass C2H6
454g CzHG guard
diab
3st exact digity (1) C2H6 454g C2H6x Imol C2H6 = 15.098 mol 2xC = 2x12.01 30.07g C2H6 6xH = 6x1.008 4st.
2xC = 2x12.01 30.07 CoHe CoHe
6×H=6×1.008 45+
30.079/mol
2) 15.098 mol (2Hox 6mol H20 = 45.3 mol H20)
(3sf.) 2 mol CzF6 (3s.f.)
1. CU CU 1 1 6 mol H.O 121 co 111
454g C2H6x I met C2H6 x 6 mol H20 = 43.45.3 mol H20 30.07g C2H6 2 mol C2H6
30.01g GHG Zuro CHg

+