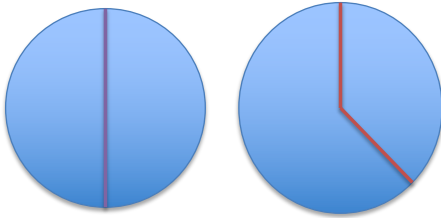


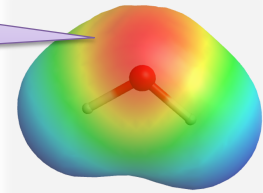


# Not All Sharing is Equal

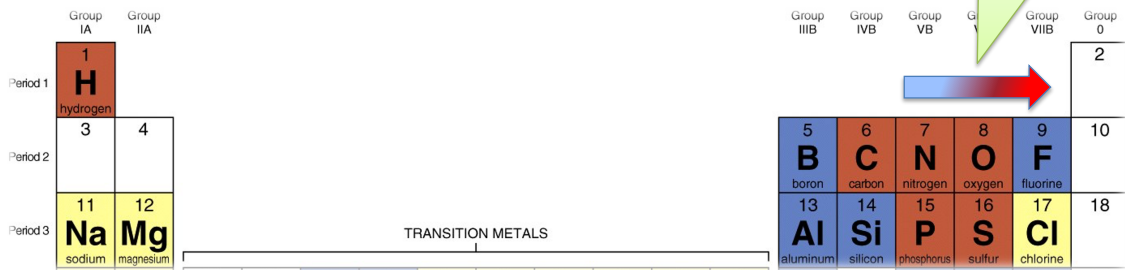
Anyone have a sibling?



Red color means more electrons are there

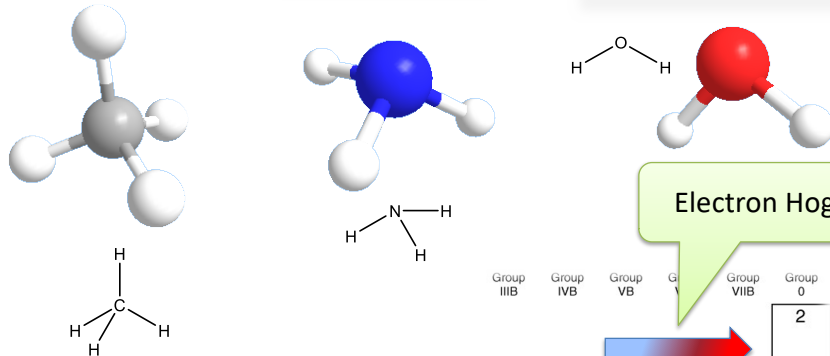
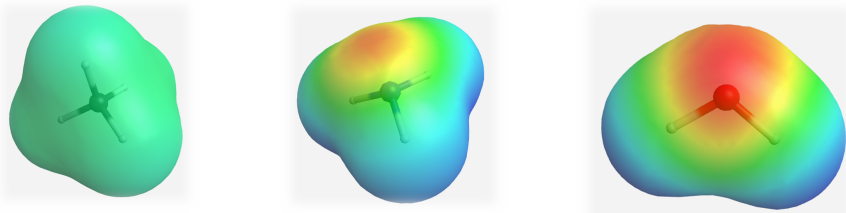


Electron Hogs

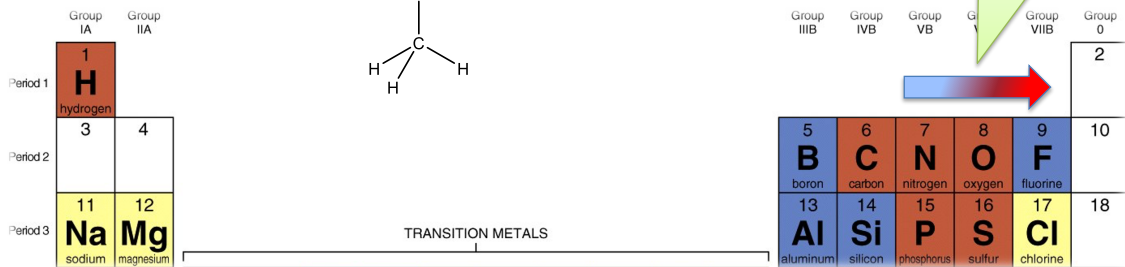


# Not All Sharing is Equal

How is charge distributed in each molecule?



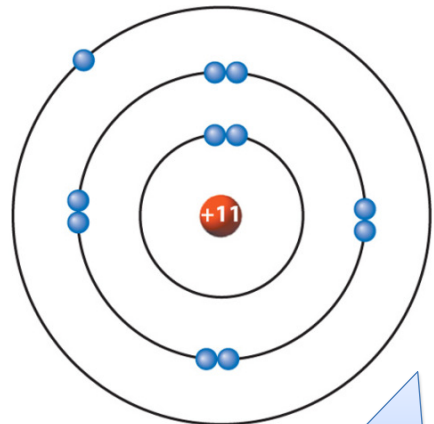
Electron Hogs





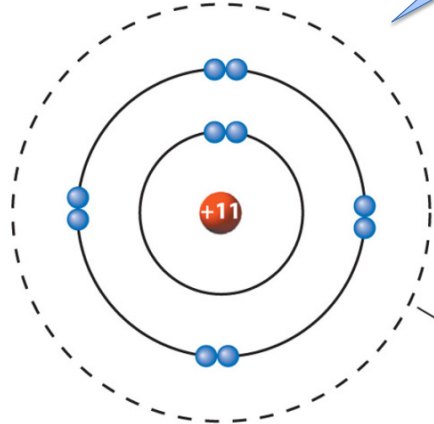
	11 <b>Na</b> sodium	12 <b>Mg</b> magnesium	TRANSITION METALS				
Period 3			23 <b>V</b> vanadium	24 <b>Cr</b> chromium	25 <b>Mn</b> manganese	26 <b>Fe</b> iron	27 <b>Co</b> cobalt
Period 4	19 <b>K</b> potassium	20 <b>Ca</b> calcium	21	22			

Why does sodium make a +1 ion?



Na  
11 protons  
11 electrons  
0 net charge

How many electrons?



Na<sup>1+</sup> (positive ion)  
11 protons  
10 electrons  
+1 net charge

You do not need to worry about why there are 3 concentric circles drawn in this cartoon.



## Why eight? (or two?)

	1 IA	Group IIA								2 0								
Period 1	1 <b>H</b> hydrogen									2								
Period 2	3	4								10								
Period 3	11 <b>Na</b> sodium	12 <b>Mg</b> magnesium	TRANSITION METALS					13 <b>Al</b> aluminum	14 <b>Si</b> silicon	15 <b>P</b> phosphorus	16 <b>S</b> sulfur	17 <b>Cl</b> chlorine	18					
	1	2	21	22	23	24	25	26	27	28	29	30	3	4	5	6	7	8