MAY 14, 2015 QUIZ TODAY

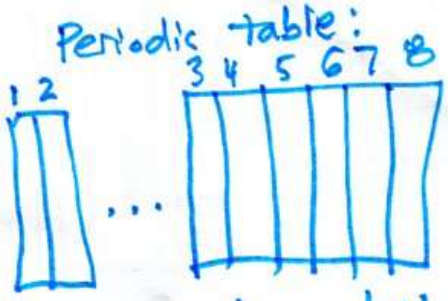
PURPOSE HOW DO WE DRAW LEWIS DOT STRUCTURES FOR MOLECULES?

WARMUP

USE YOUR SHEET TO DRAW THE ELECTRON CONFIGURATION FOR A NEUTRAL ATOM WITH 30 e^-

THEN DRAW ITS LEWIS DOT STRUCTURE

A SHORTCUT FOR FINDING NUMBER OF VALENCE e^-



these numbers tell how many valence e^- in the neutral element

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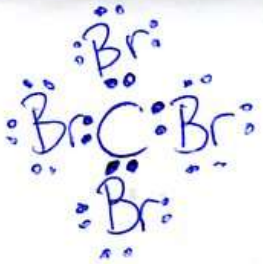
PROBLEM:
HOW DO WE DRAW A LEWIS STRUCTURE FOR CBr_4?

Total valence e^- in CBr_4 is
$4+7+7+7+7 = 32e^-$

PROBLEM HOW DO WE DRAW THE LEWIS DOT STRUCTURE of CBr_4?

total valence e^- = 4+7+7+7+7=32 e^-



THE STEPS TO WRITING A LEWIS DOT MOLECULE

1) COUNT THE TOTAL # OF VALENCE e^-
2) POSITION THE LETTERS TO REPRESENT THE ATOMS
3) DRAW PAIRS OF e^- TO FORM BONDS BETWEEN ATOMS
4) PUT LEFTOVER e^- AS LONE PAIRS.
5) FORM STABLE ATOMS (OCTETS/DUETS)
*6) IF YOU RUN OUT OF e^- MOVE LONE PAIRS INTO DOUBLE/TRIPLE BONDS

Wrong Lewis Dot Molecule Structures

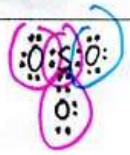
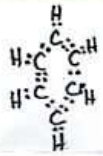
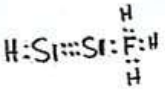
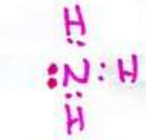
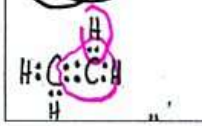
CλeMis+ry: http://genest.weebly.com

Stop in for help every day at lunch and Tues,&Thurs after school!

Name ANSWERS

Period _____

1. Fill in the table

Circle atoms that are stable, cross out atoms that are unstable	Either write 'stable' or redraw the same letters in the same arrangement but with any number of e- that will make the atoms stable	Circle atoms that are stable, cross out atoms that are unstable	Either write 'stable' or redraw the same letters in the same arrangement but with any number of e- that will make the atoms stable
	all good ☺		stable
			stable
	stable		
	stable		

2. Rewrite the following Noble Gas Abbreviations in the longer version of electron configuration ($1s^2\ 2s^2$ etcetera)
   a. $[Ne]3s^23p^2$ $1s^22s^22p^63s^23p^2$
   b. $[He]2s^22p^1$ $1s^22s^22p^1$
   c. Write the Lewis Dot symbol for <u>each</u> of the two atoms above:

13. Write a balanced equation for N^{3-} anion losing three electrons:

N^{3-} _____ → N + $3e^-$

14. Write a balanced equation for Na+ ion gaining one electron:

$Na^+ + e^-$ → Na