

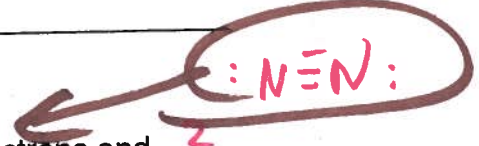
$\text{N} \rightarrow 1 \text{ pair} + 3 \text{ unpaired}$

Chapter 8 Review
Targets #1-9

Name _____

(one) ↑

993



1. The Lewis symbol for nitrogen contains _____ pair(s) of electrons and _____ unpaired electrons.

nonbonded pairs

2. For a given salt, lattice energy increases as ionic radius decrease and as ionic charge increase.

$LE = k \frac{Q_1 Q_2}{d}$

3. Match the salt on the left with the lattice energy on the right:

LiCl	→	2,326 kJ/mol
CsCl		834 kJ/mol
MgCl ₂		657 kJ/mol

increase ↓ decrease

4. What are the periodic trends for electronegativity?

5. The the following bonds in order of increasing polarity: O-O, O-C, O-N



6. List 2 covalent bonds which are more polar than the F-O bond.



7. Consider the following bonds: C-O, C=O, C≡O

- a) Which is the longest bond? $\text{C}-\text{O}$
- b) Which is the strongest bond? $\text{C} \equiv \text{O}$
- c) Which has the most shared electrons? $\text{C} \equiv \text{O}$

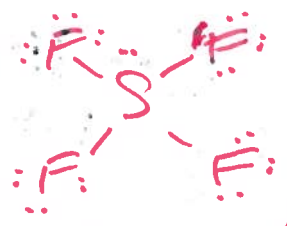
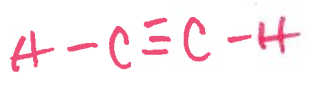
Special!

8. Draw the dot structures for . . .

a) AsF₃

b) C₂H₂

c) SF₄



Seesaw!

9. Which of the following exhibit resonance?

a) NH₄⁺

b) CO₃²⁻

c) SO₃²⁻

