



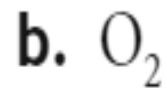
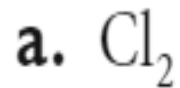
Unit 4: Chemical Reactions

Lesson 8: Eight is Enough

Guiding Question: How do you create Lewis Dot diagrams and structural formulas for compounds with double and triple bonds?

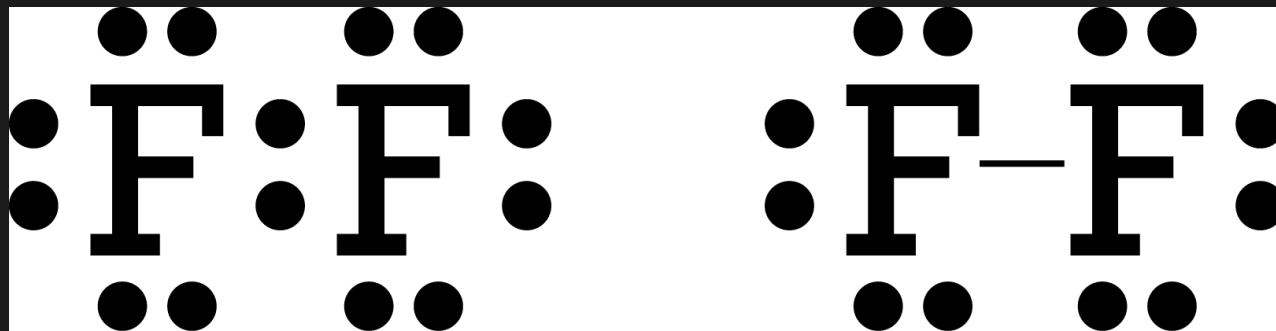
Do Now:

Draw the Lewis dot structure for the two covalently bonded molecules shown here. Explain how you arrived at your answer.



Notes

- Octet Rule: nonmetals combine so that each atom has a total of 8 valence electrons by sharing electrons. The only exception is hydrogen, which only needs 2 valence electrons in order to fill the first shell.
- Ex. F_2



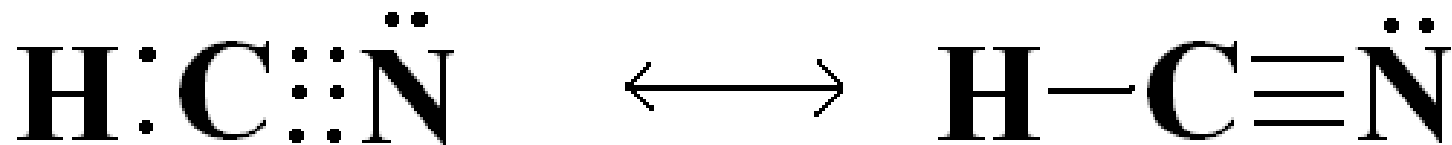
Notes

- Ex. H₂O

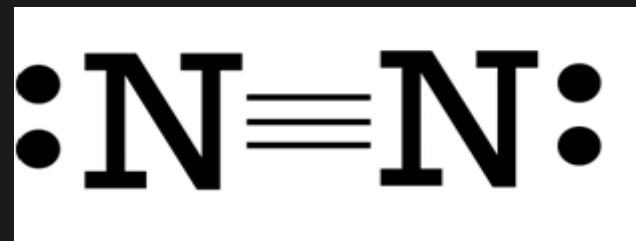


Notes

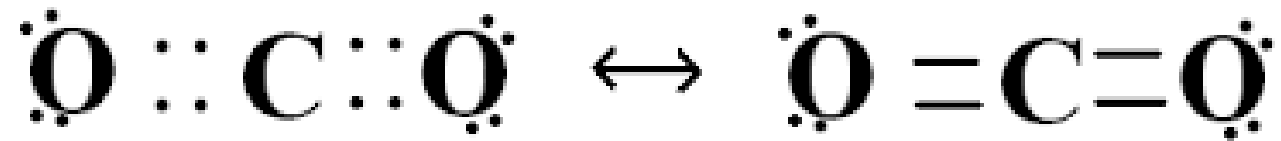
- The HONC 1234 rule and the octet rule both help you figure out Lewis structures and structural formulas.
 - Both of these rules can be satisfied by using double and triple bonds appropriately
 - Ex. HCN



- Ex: N₂



- Ex: CO₂



Closure

- Answer Guiding Question on page 5
- Homework #4 due Friday, 3/2
- Achieve 3000: The Car that Runs on Chocolate due Friday, 3/9 at 11:59pm