

| High Oleic Oil<br>Molecular Structures<br>Name                 |             | Date               |
|--|-------------|--------------------|
| Use the presentation provided to complete the following notes. |             |                    |
| Molecular Formula  | Dot Diagram | Structural Formula |
|  |             |                    |
| Fill in the missing info…<br>Structural Formulas               |             |                    |
| 1. Find the central atom.                                      |             |                    |

- 2. Find the total number of
- 3. Divide the total number of e's by 2. this = the
- 4. Place 1 bond pair between the
- 5. Place the remaining pairs about the atoms to

Examples:

 $\mathsf{NF}_3$ 

 $\text{CIO}_4^-$ 



## Exceptions to the Octet Rule

- 1. When there are an odd # of \_\_\_\_\_\_
  - a. Ex: NO<sub>2</sub>
- 2. Some compounds form with fewer than \_\_\_\_\_\_.
  - a. Ex: BH<sub>3</sub>

These are \_\_\_\_\_

3. Expanded Octet – The central atom

a. Ex: PCl<sub>5</sub>

- 4. Resonance Structures A condition that occurs when
- 5. \_\_\_\_\_
  - a. Ex: [NO<sub>3</sub>]<sup>-</sup>

b. The actual nitrate ion is an average of the three structures. They are not identical!

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