

Resonance

Sometimes more than 1 Lewis Dot structure can be drawn for the same compound. The only difference between the structures is the arrangement of the electrons (the connectivity between the atoms cannot change)

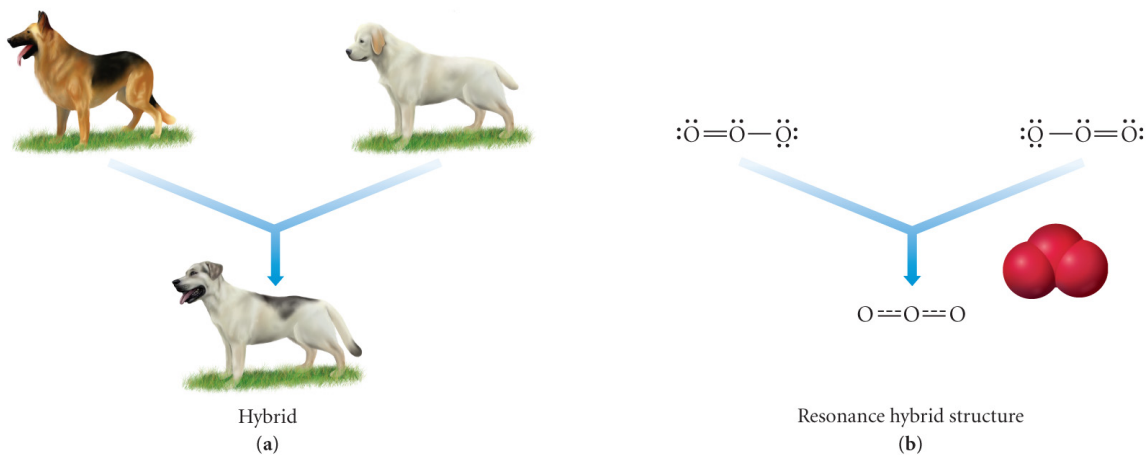
These 2 (or more) structures are called resonance forms

The actual structure, the hybrid structure, is a mixture of all the contributing resonance forms.

What makes a good resonance form?

1. All atoms have an octet
2. Minimum charge on the molecule
3. Negative charges are on electronegative atoms
4. Maximum number of covalent bonds

Example: O_3



Problems to work:

Write a Lewis structure for the following, as well as the resonance structures.



For the next two molecules, identify which resonance structure contributes most of the hybrid structure.

