### 9.5 Review Questions

1. What are the shapes of the following molecules?

| $\mathrm{BeCl}_{2}$ | $\mathrm{BF}_{3}$ | $\mathrm{CBr}_{4}$ | $\mathrm{~K}_{2} \mathrm{O}$ | Rbl |
| :--- | :--- | :--- | :--- | :--- |

2. Make the electron dot for $\mathrm{C}_{3} \mathrm{H}_{6} \mathrm{O}$. What would its shape be?
3. What shape are the following molecules?
a. $\mathrm{CCl}_{4}$
b. $\mathrm{Na}_{2} \mathrm{~S}$
c. RbF
d. $\mathrm{AlBr}_{3}$
e. $\mathrm{H}_{3} \mathrm{~N}$
f. $\mathrm{Li}_{2} \mathrm{O}$
4. Both Be and O have two bonding sites. When Be is the central atom, the shape of the molecule is linear. When $O$ is the central atom, the molecule is a bent line. Why are they different?
5. What shape is a molecule of $\mathrm{CO}_{2}$ ?
