

**Extra Lewis Structure Problems**

1. Draw Lewis structures for the following.

- |                                    |                             |                           |
|------------------------------------|-----------------------------|---------------------------|
| a) $\text{H}_2\text{O}_2$          | e) $\text{CH}_3\text{NH}_2$ | i) $\text{C}_3\text{H}_8$ |
| b) $\text{CH}_3\text{Cl}$          | f) $\text{HCN}$             | j) $\text{CH}_2\text{O}$  |
| c) $\text{C}_2\text{H}_6$          | g) $\text{C}_2\text{H}_2$   | k) $\text{N}_2$           |
| d) $\text{CH}_3\text{O}_2\text{H}$ | h) $\text{CH}_4\text{O}$    | l) $\text{SiCl}_4$        |

2. Draw the multiple Lewis structures for each of the following formulae. Note: For some of the formulae there may be more than 2, 3 or 4 possible structures.

Give two possible structures

- a)  $\text{C}_3\text{H}_6$
- b)  $\text{C}_2\text{H}_6\text{O}$
- c)  $\text{C}_3\text{H}_7\text{Br}$
- d)  $\text{C}_4\text{H}_{10}$

Give three possible structures

- e)  $\text{C}_3\text{H}_6\text{O}$
- f)  $\text{C}_3\text{H}_8\text{O}$
- g)  $\text{C}_2\text{H}_5\text{N}$
- h)  $\text{C}_5\text{H}_{12}$

Give four possible structures

- i)  $\text{C}_3\text{H}_6\text{Cl}_2$

3. Convert all of the Lewis structures from above to bond line (skeletal) structures.