Introduction Discussion Sheet

1. Convert these condensed formulas to Lewis structures.

\[
\text{CH}_3\text{OH}
\]

\[
\text{CH}_2\text{ClCH}_2\text{CH}_2\text{COOH}
\]

2. Convert these condensed formulas to Lewis structures. The compounds are ionic; add formal charges where necessary.

\[
\text{CH}_3\text{CH}=\text{CHCH}_2\text{NH}_3
\]

\[
\text{CH}_3\text{CH}_2\text{O}
\]

\[
\text{CH}_3\text{CH}_2\text{S}
\]

Notice: Oxygen and sulfur in some column of periodic table leads to similar Lewis structures.

3. Convert these condensed formulas to Lewis structures. A subtle difference in formula leads to a major structural difference. Name the functional groups.

\[
\text{CH}_3\text{COCH}_2\text{CH}_3
\]

Ketone

\[
\text{CH}_3\text{CH}_2\text{OCH}_2\text{CH}_3
\]

Ether

4. Draw Lewis structures for these common inorganic ions/molecules.

\[
\text{NaSH}
\]

\[
\text{KOH}
\]

\[
\text{K}_2\text{CO}_3
\]

\[
\text{NaHCO}_3
\]

\[
\text{H}_2\text{SO}_4
\]

\[
\text{LiH}
\]

\[
\text{NaNH}_2
\]