For each of the following questions, be sure that any lines or circling required is drawn with commitment. Non-committal line may not earn credit.

1. (2 pts) Account for the bonds formed and broken in the following reaction by using curved arrow notation (aka “electron arrow pushing”).

\[
\text{H}_3\text{C}-\text{O} : \text{Na}^+ \rightleftharpoons \text{H}_3\text{C}-\text{Br} \rightarrow \text{H}_3\text{C}-\text{O} \cdots \text{C} = \text{H} \rightleftharpoons \text{Na}^+ \text{Br}^-
\]

2. (2 pts) Circle the Lewis acid(s) from the following compounds.

\[
\begin{align*}
\text{N} & \quad \text{F} & \quad \text{B} \\
\text{N} & \quad \text{F} & \quad \text{F} \\
\text{F} & \quad \text{B} & \quad \text{F}
\end{align*}
\]

3. (2 pts) Indicate the hybridization for the atoms specified.

\[
\begin{align*}
\text{N} & \quad \text{C} \quad \text{C} \quad \text{C} \quad \text{C} \\
\text{H} & \quad \text{H} & \quad \text{H} & \quad \text{H} \\
\text{OH} & \quad \text{C} \quad \text{C} \quad \text{C} \quad \text{C}
\end{align*}
\]