Polar reaction mechanisms

Rule 1 – electrons move from the nucleophile to the electrophile

Rule 2 – the nucleophile can be negative or neutral
Hydride shift: The shift of a hydrogen atom and its electron pair between neighbouring carbons, the secondary carbocation intermediate formed by protonation rearranges to form a more stable tertiary carbocation.

![Hydride shift diagram]

Alkyl Shift: The shift of an alkyl group with its electron pair between neighbouring carbons

![Alkyl shift diagram]