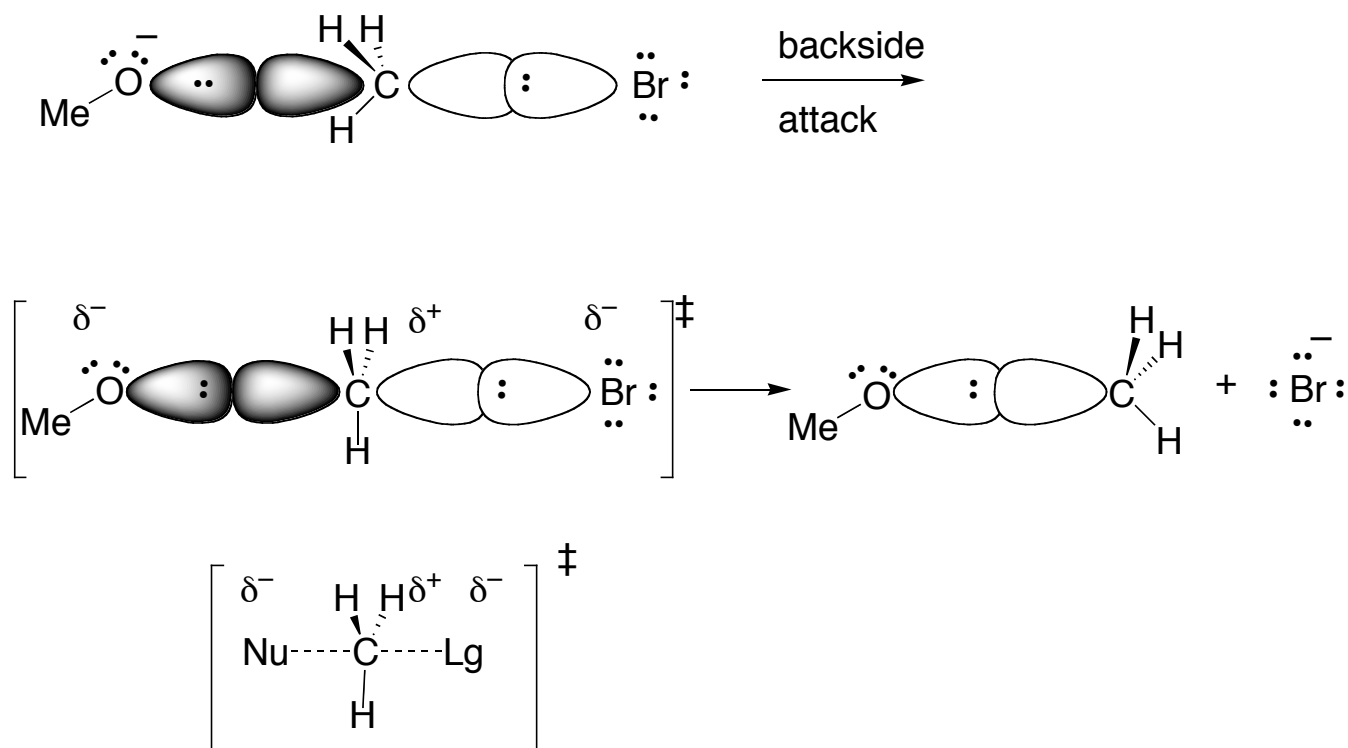


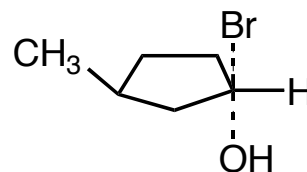
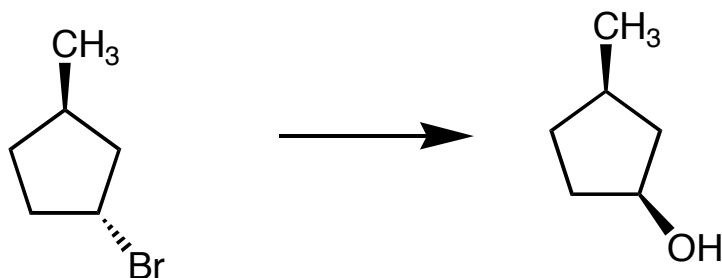
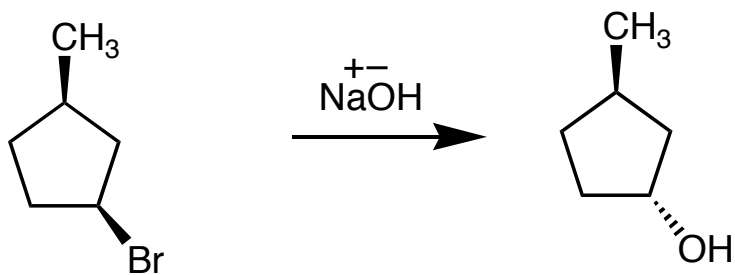
The Mechanism of the S_N2 Reaction



- Nu[−] cannot interact with σ (full!)
- Overlap of lone pair electrons with C—X σ* begins to form new bond
- Electron density in C—X σ* causes C—X bond to start breaking
- Nucleophilic attack causes rehybridization
- at TS, C ≈ sp², planar
- C is “turned inside out”, **inverted**

Stereochemical Consequences

S_N2



Relative configuration is inverted

