## **Electrophilic Addition to Alkenes**

General Scheme:

$$+ E-X \rightarrow E + X^{\ominus} \rightarrow E$$

E = electrophilic group X = leaving group

Example: Hydrohalogenation (addition of HX).

$$\rightarrow$$
 + H—Br  $\rightarrow$  H $\rightarrow$  Br

## Markovnikov's Rule of Electrophilic Addition

Electrophiles typically add such that the most stable cation intermediate is formed. (Usually, so that the electrophile is bound to the less substituted carbon.)

Hydrohalogenation example:

We would call this reaction *regioselective*.

## Markovnikov Addition of H<sub>2</sub>O to Alkenes

H<sub>3</sub>C

observed.