CONCEPT: HYDROHALOGENATION REACTIONS

• Under this type of reaction, ____ H and ____ X (Br or CI) are added to ___ π bond.

Hydrohalogenation Reactions	
Alkene	Alkyl halide
$H_3C-C=C-CH_3 + HX$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

EXAMPLE: Complete the following hydrohalogenation reaction.

Markovnikov's Rule

• Addition of H and X follows Markovnikov's rule.

□ Markovnikov's Rule: ____ atom is added to C with _____ Hs, ___ atom is added to C with ____ Hs.

Hydrohalogenation Reactions

Alkene

Alkyl halide

$$H_3C - \stackrel{H}{C} = CH_2 + HX \longrightarrow H_3C - \stackrel{L}{C} - CH_2$$

Alkyne

Dihalide

 $H_3C - C = CH + 2HX \longrightarrow H_3C - \stackrel{L}{C} - CH$

 $\textbf{EXAMPLE}: Complete \ the \ following \ hydrohalogenation \ reaction.$

CONCEPT: HYDROHALOGENATION REACTIONS

PRACTICE: Write a hydrohalogenation reaction with excess HCl and name the organic product formed.

