

**THEORY**

1. The reaction of an alkene with a halogen is an example of an electrophilic addition reaction. The pi electrons of the double bond attack the halogen molecule, forming a cyclic intermediate called a halonium ion. The halide ion then attacks the carbocation to form the final halogenated alkane product.

Step	Intermediate	Product
1. Electrophilic attack	Halonium ion	Halogenated alkane
2. Nucleophilic attack	Halide ion	Halogenated alkane

**EXPERIMENT**

