

Electrophilic Addition

Pre-lesson assignment – Textbook pg 178-9 and 205-206

Define the following terms

- Reaction mechanism
- Electrophile
- Addition reaction
- Electrophilic addition reaction
- Carbocation

Now watch the video tutorial on Electrophilic Addition

Make notes on electrophilic addition reactions

1. Why do alkenes often undergo addition reactions?
2. Draw a mechanism for the addition of HBr to ethene
 - a. Explain what is happening during each step of the reaction.
 - b. Explain how HBr acts as an electrophile
 - c. What do curly arrows show?
3. Draw a mechanism for the addition of Br₂ to ethene.
 - a. Explain how Br₂ can become an electrophile even though it is non-polar.
 - b. Why is the breaking of the Br-Br bond considered heterolytic fission?
 - c. What colour change would you expect to see? Explain your answer.