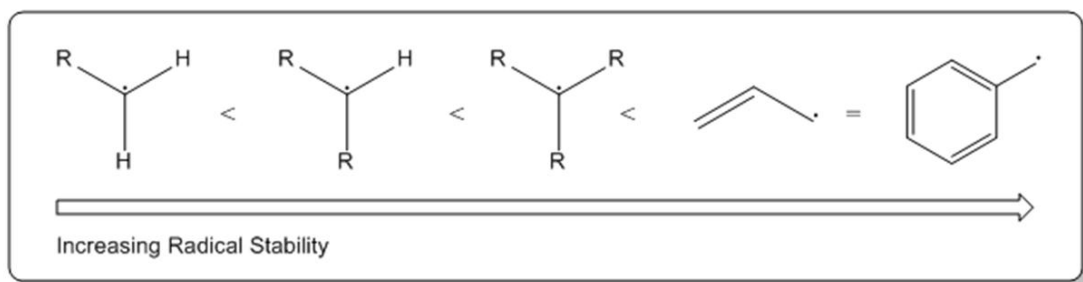


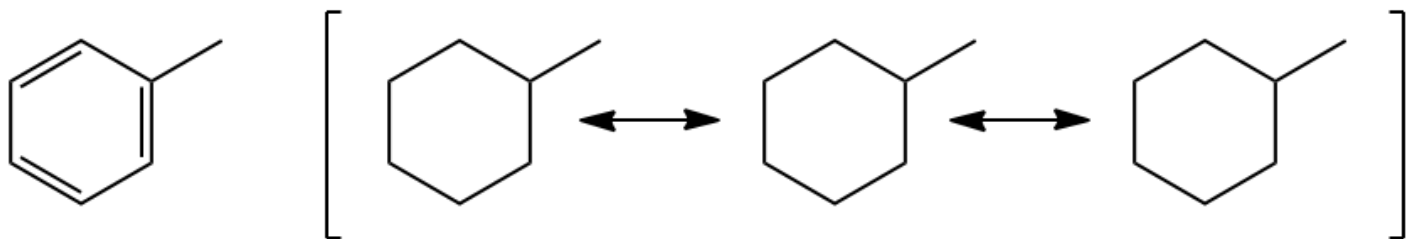
## CONCEPT: SIDE-CHAIN HALOGENATION

The alkyl group directly attached to benzene is known as an **alkyl side-chain**.

- The *benzylic position* of a side-chain is one of the most stable locations for radicals due to *conjugation*.
- Recall that benzylic radicals are some of the most stable radical intermediates possible

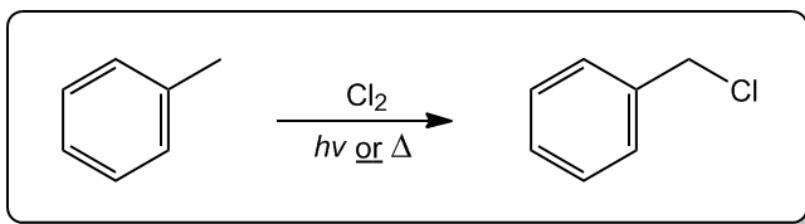


### Benzylic Resonance Structures:



### Specific Side-Chain Halogenations:

#### **Benzylic Chlorination**



#### **Benzylic Bromination**

