

**30** An organic ion containing a carbon atom with a negative charge is called a carbanion.

An organic ion containing a carbon atom with a positive charge is called a carbocation.

The reaction between NaOH(aq) and 1-bromobutane proceeds by an S<sub>N</sub>2 mechanism.

What is the first step in the mechanism?

- A** attack by a nucleophile on a carbon atom with a partial positive charge
- B** heterolytic bond fission followed by attack by an electrophile on a carbanion
- C** heterolytic bond fission followed by attack by a nucleophile on a carbocation
- D** homolytic bond fission followed by attack by a nucleophile on a carbocation