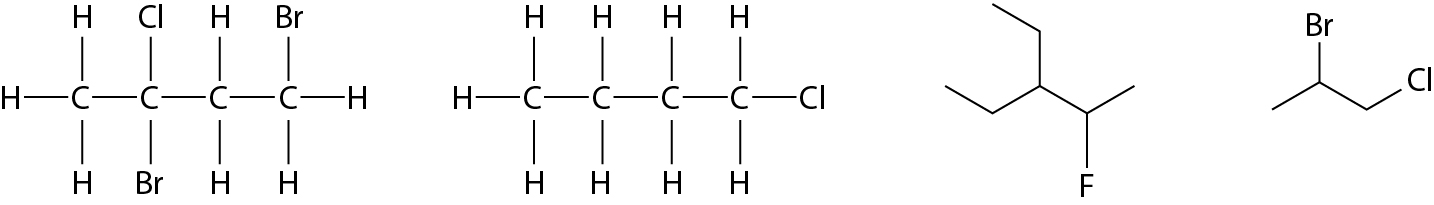
Name Date

Worksheet 21.1: The formation of halogenoalkanes in radical reactions

**1** Name the following halogenoalkanes:



**2** Cyclohexane reacts with bromine in the presence of ultraviolet light.

1. Write a balanced chemical equation for this reaction using structural formula.

1. Draw the mechanism for the reaction, showing each steps clearly.
2. Explain the terms free radical and homolytic fission.

1. Considering only structural isomers, how many monosubstituted organic products are there  
   when methylcyclohexane reacts with bromine?