

Fill in the blanks:

Friedel-Crafts Alkylation

Step	Mechanism
Step 1	
	<p>This is a <i>Lewis/Bronsted-Lowry</i> acid-base reaction. The complex dissociates to form a <i>carbocation/carbanion</i> and AlCl_4^-</p>
Step 2	
	<p>The <i>carbocation/carbanion</i>, acting as an <i>electrophile/nucleophile</i>, reacts with benzene to produce an arenium ion.</p> <p>A <i>electron/proton</i> is removed from the arenium ion to form isopropylbenzene. This step also regenerates the AlCl_3 and liberated HCl.</p>