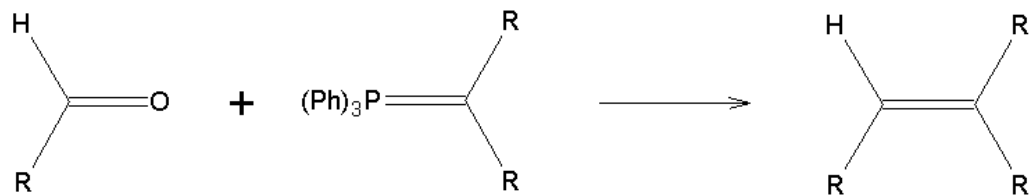


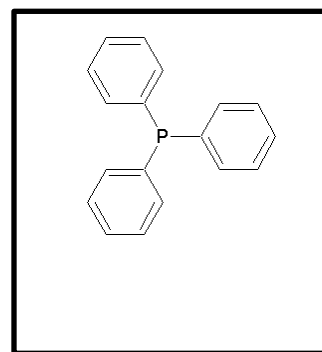
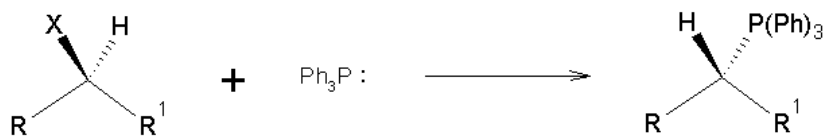
CONCEPT: THE WITTIG REACTION

The Wittig forms new carbon-carbon bonds between carbonyl and reactive intermediate called an “ylide” to yield regiospecific _____

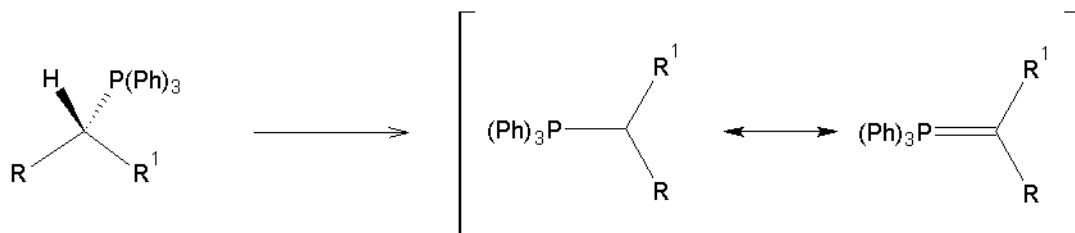


Formation of the Ylide:

- STEP 1 – Alkyl Halide + Triphenylphosphine



- STEP 2 – Deprotonation with a Strong Base



- STEP 3 – Form Oxaphosphetane (mechanism) or Box-Out Method (product).

PRACTICE: Determine the carbonyl and ylide that formed the following product.

