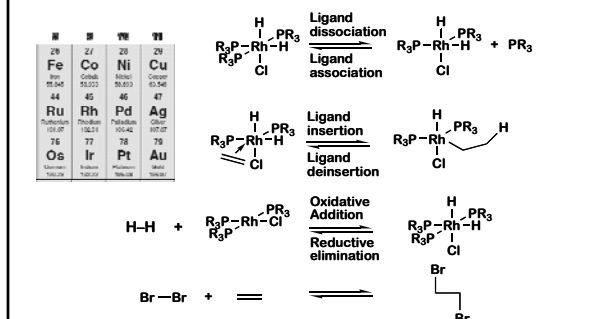
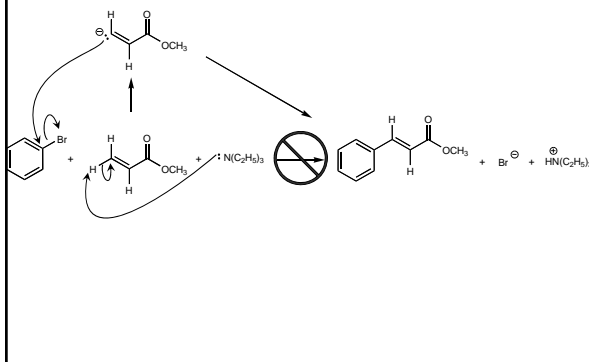


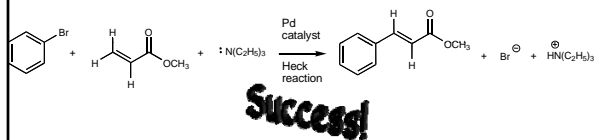
Transition metal reaction mechanisms can be divided into fundamental reaction types. (page 1012 - 1014 in book)



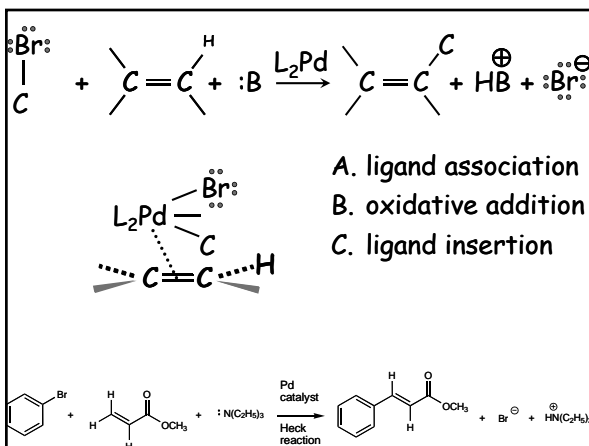
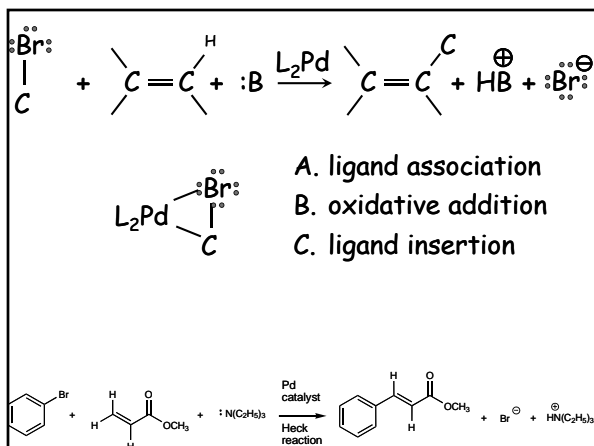
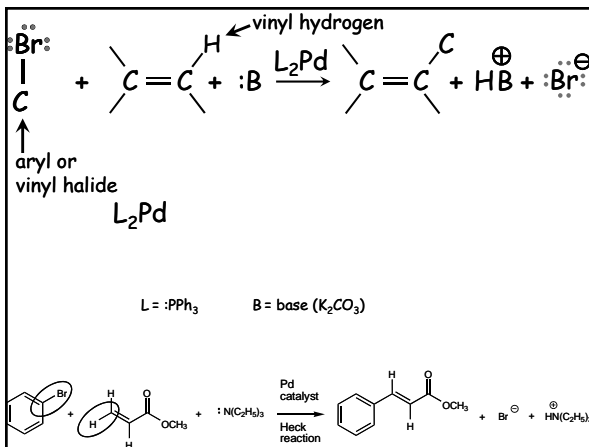
Why have transition metals become so important?
They catalyze possible but unknown transformations?

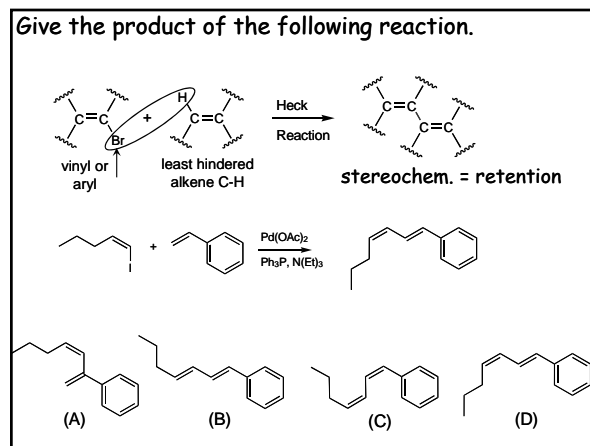
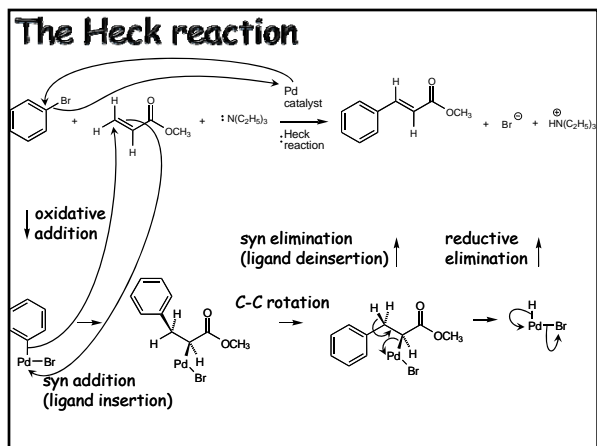
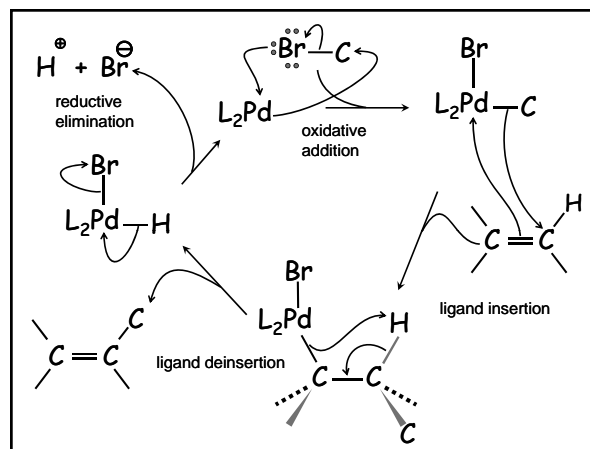
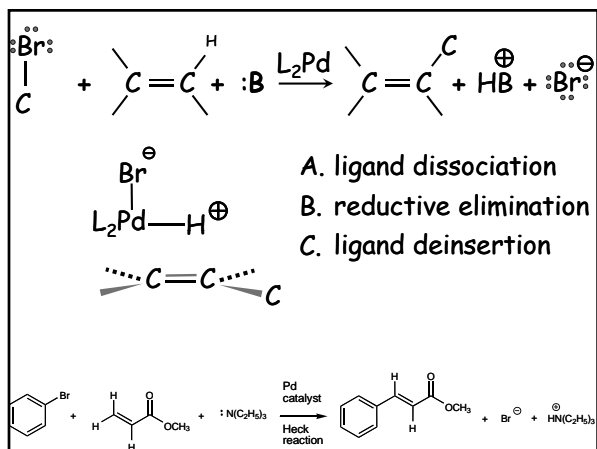
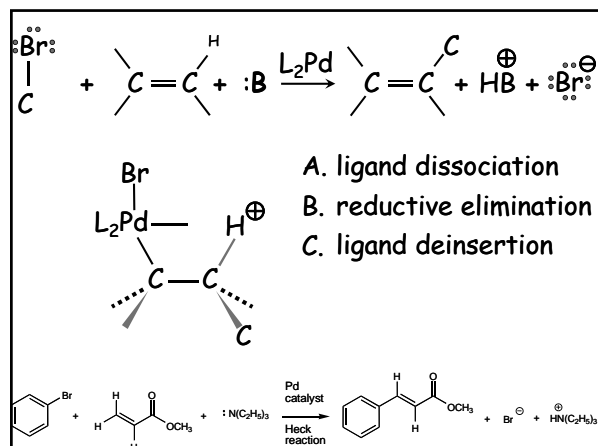
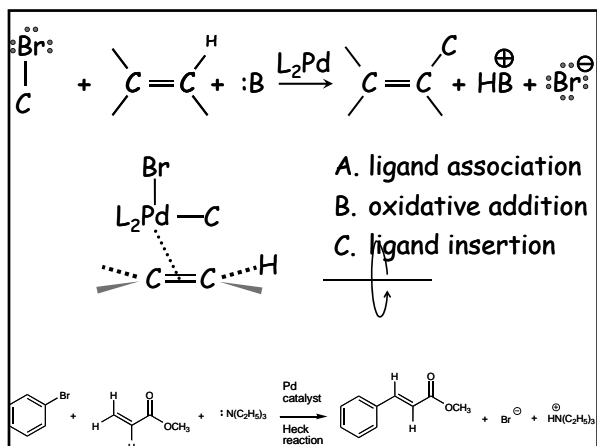


If a palladium catalyst is added this is a successful reaction.



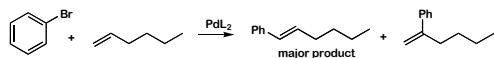
How does the Pd allow this reaction to occur?



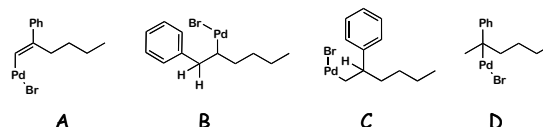
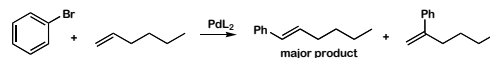


In addition to the expected product of the Heck reaction, an alternative product was observed.

Propose a reaction mechanism for the formation of this second product.

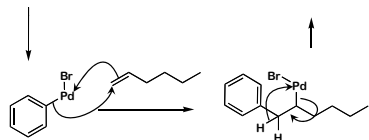
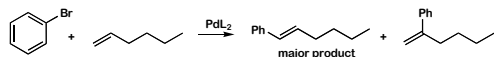


Choose an intermediate in the reaction mechanism for the formation of the minor product.



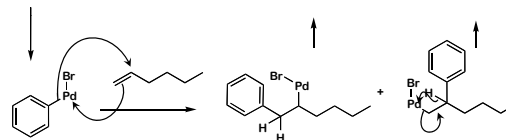
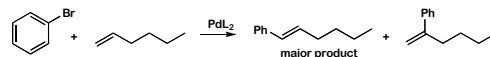
In addition to the expected product of the Heck reaction, an alternative product was observed.

Propose a reaction mechanism for the formation of this second product.

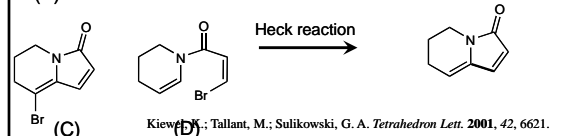
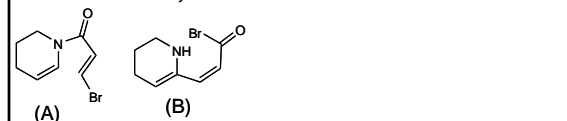
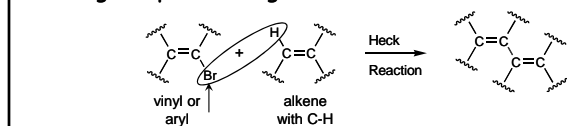


In addition to the expected product of the Heck reaction, an alternative product was observed.

Propose a reaction mechanism for the formation of this second product.

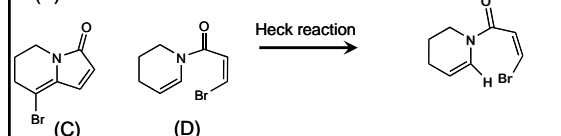
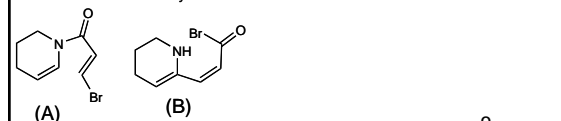
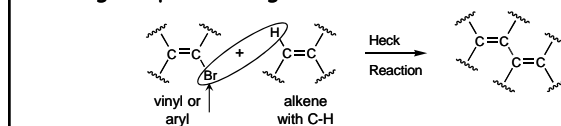


Suggest reactants that could be used to prepare the following compound using the Heck reaction.

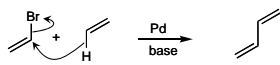


Kievskii, S.; Tallant, M.; Sulikowski, G. A. *Tetrahedron Lett.* **2001**, 42, 6621.

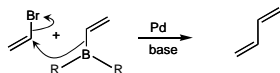
Suggest reactants that could be used to prepare the following compound using the Heck reaction.



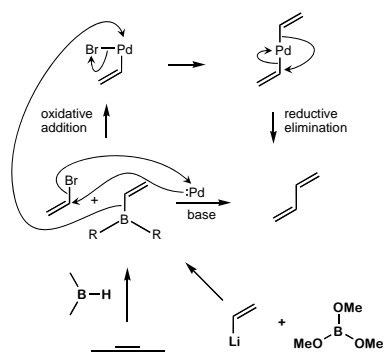
The Heck Reaction:



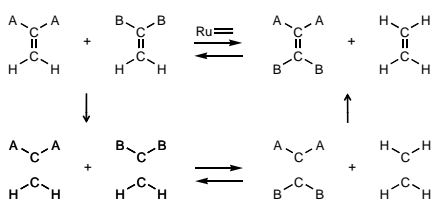
The Suzuki Reaction:



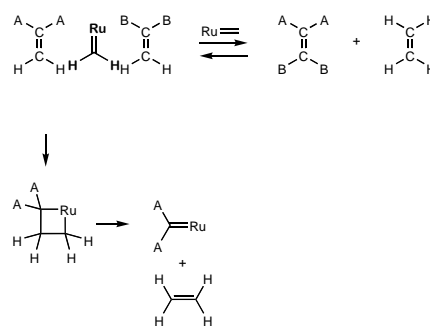
The Suzuki Reaction:



Olefin metathesis.



Olefin metathesis.



Olefin metathesis.

