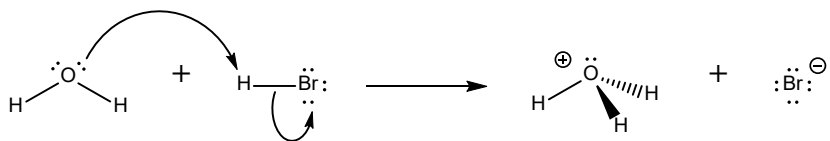


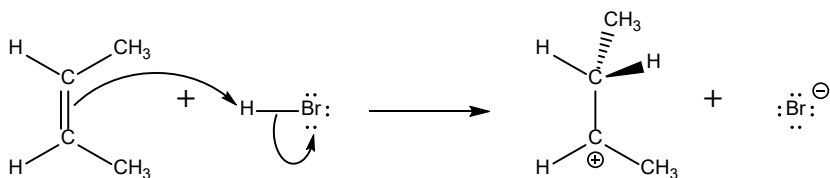
Answers to Exercise 11.1
Showing Electron Movement with Curved Arrows

1.

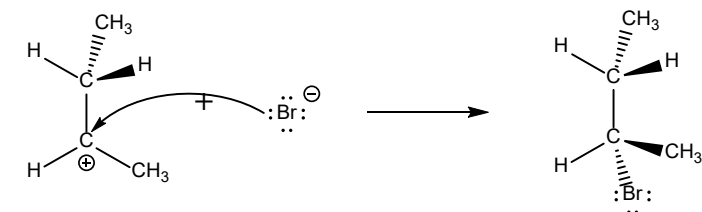
(a)



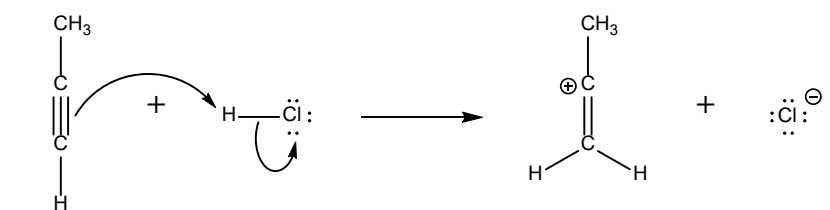
(b)



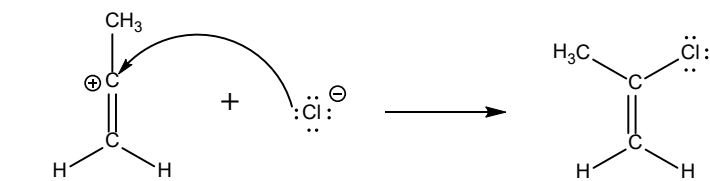
(c)



(d)

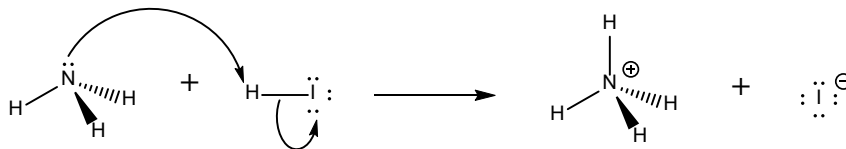


(e)

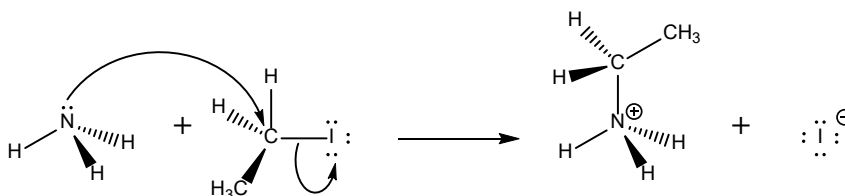


2.

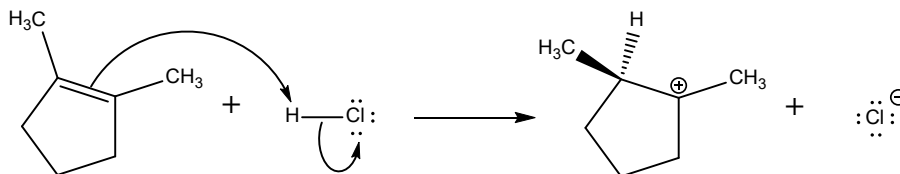
(a)



(b)

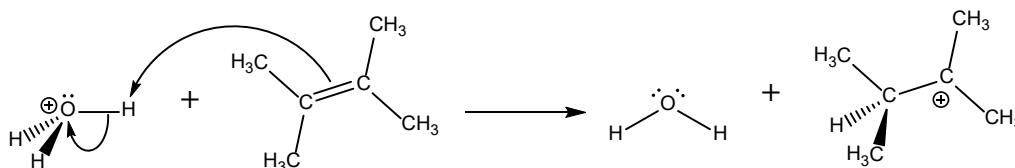


(c)



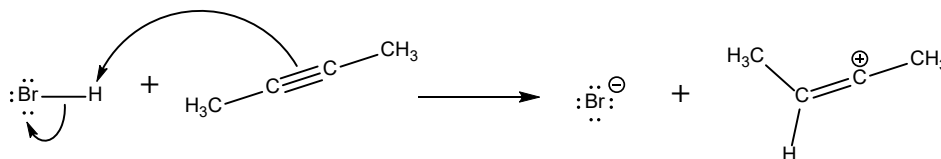
You can attach the hydrogen atom from HCl to either of the two carbon atoms from the alkene - as long as you draw the positive charge on the other carbon atom.

(d)



You can attach the hydrogen atom from H₃O⁺ to either of the two carbon atoms from the alkene - as long as you draw the positive charge on the other carbon atom.

(e)



You can attach the hydrogen atom from HBr to either of the two carbon atoms from the alkyne - as long as you draw the positive charge on the other carbon atom. Note that the positively charged carbon atom is still linear as per VSEPR.