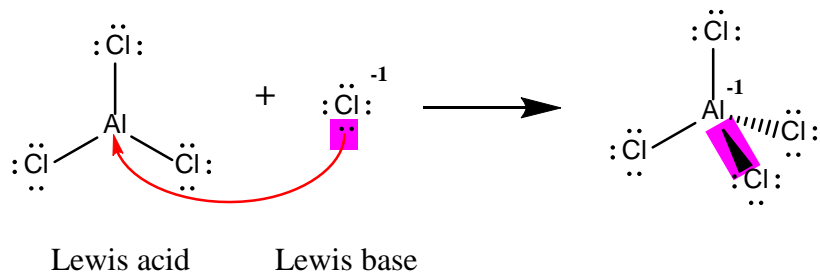


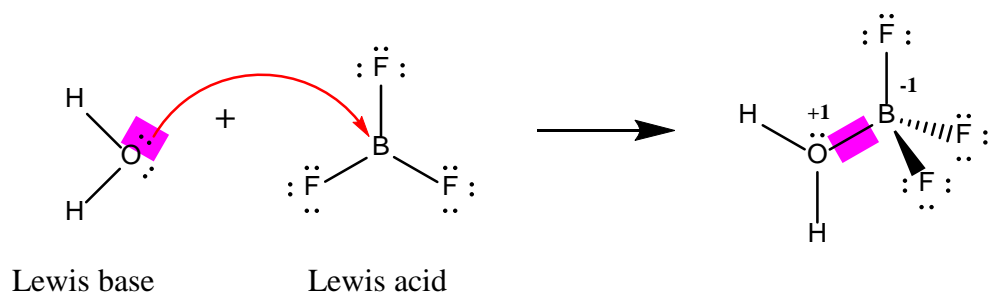
Answers to Exercise 10.3 Showing Electron Movement with Curly Arrows

1.

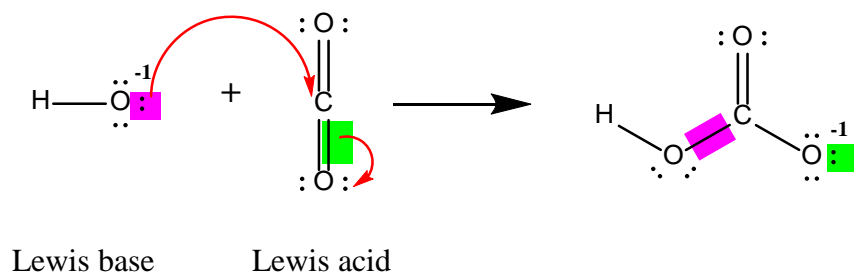
(a)



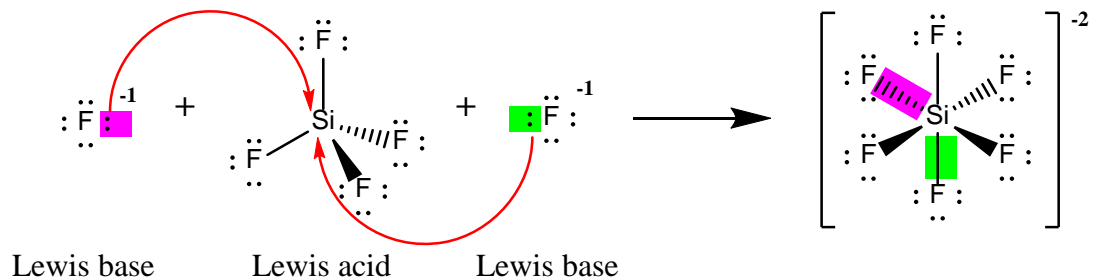
(b)



(c)

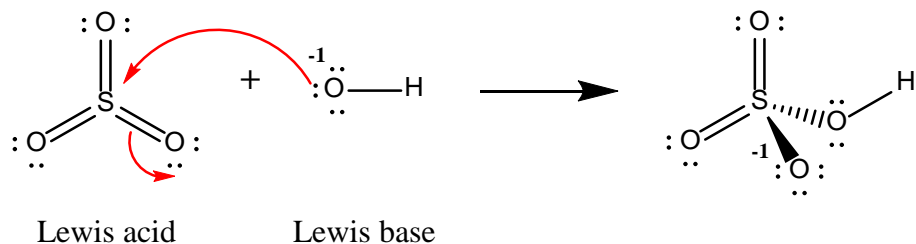


(d)

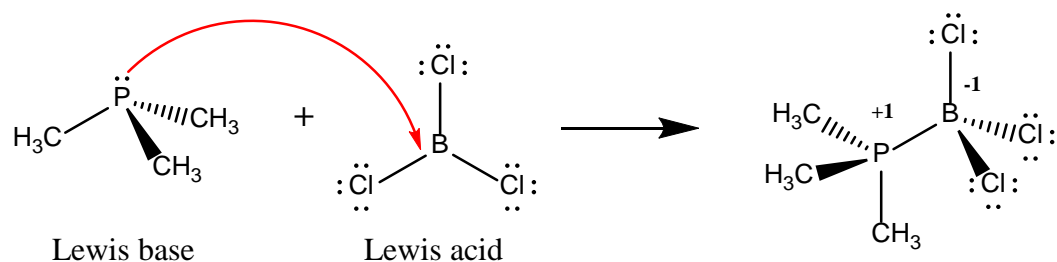


2. *The overall charge of the product should always be equal to the sum of the charges of the reactants!*

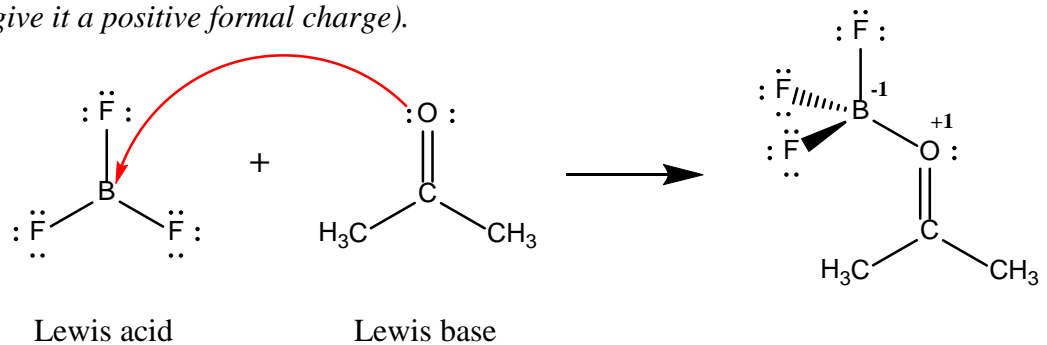
(a)



(b)



(c) *Compounds containing C=O bonds can either be Lewis acids (as we have seen with CO₂) or Lewis bases (sharing one of the lone pairs on O). BF₃ can only be a Lewis acid since B has no electron pair to share and neutral F rarely shares an electron pair (since that would give it a positive formal charge).*



(d) *Cu²⁺ is the Lewis acid. All six NH₃ are Lewis bases.*

