

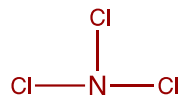
## Lewis Structures Part 1: The Basics Answer Key

Consider the following compound:

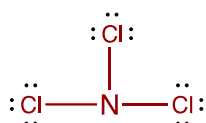


How many valence electrons? 26

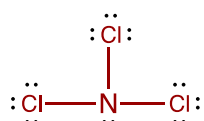
Draw the skeletal structure



Distribute the electrons about each peripheral atom



If there are electrons left over, place them on the central atom



Count the electrons around each atom. Does each atom have an octet? *Yes, each atom has an octet of electrons. This is a valid Lewis structure.*

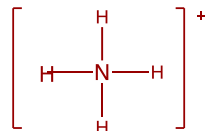
Consider the following ion:



How many valence electrons?

*8 valence electrons. One electron is subtracted due to the positive charge.*

Draw the Lewis structure



Is this a valid Lewis structure? Why? *Yes, because the nitrogen has an octet of electrons. Each hydrogen is surrounded by two electrons.*