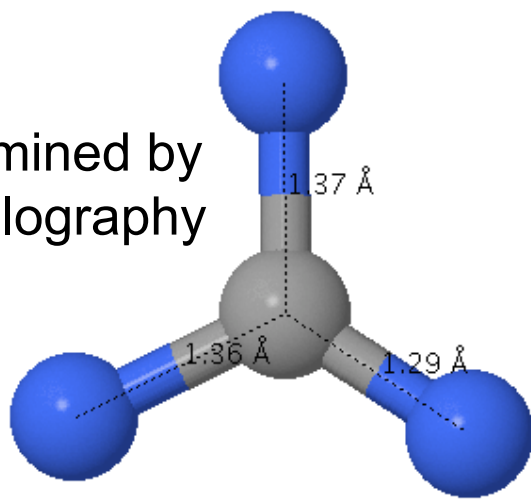


Interpretation of X-Ray Structures

Experimental structural data, such as that obtained from X-ray crystallography, provides chemists with a molecule's "connectivity map" for all atoms that are heavier than hydrogen. This powerful technique even provides the Cartesian coordinates for each non-hydrogen, so bond distances and angles can be determined. However, it is up to the chemist to determine the electron configuration of each atom and the location of the hydrogen atoms. The connectivity map for CH_5N_3 was recently reported and is shown below. You also know that the structure is neutral, i.e., it has a net charge of zero. Your task is to determine a satisfactory Lewis structure.

CH_5N_3 determined by
X-ray crystallography



Draw the Lewis Structure

REFERENCE: *Chem. Commun.*, **2007**, 3180-3182, DOI: 10.1039/b705100j

