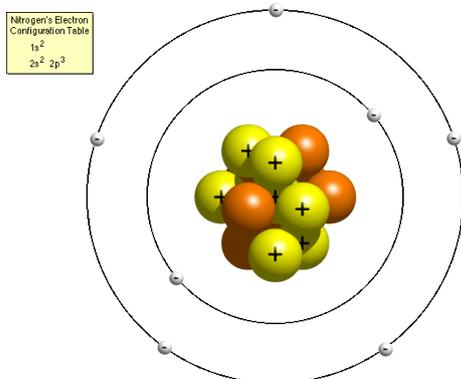


Answer on Question #61210 - Chemistry - Inorganic Chemistry

Question

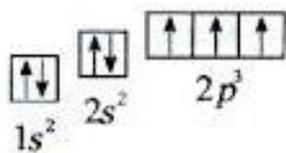
13. The picture is a model of a nitrogen atom. What is incorrect about the atomic orbital arrangement of electrons in this model?



Answer

The picture has incorrect number of atomic orbitals and wrong arrangement of electrons.

The configuration of the nitrogen atom is $1s^2 2s^2 2p^3$, and arrangement of the electrons in orbitals is illustrated in this scheme:



Thus, the picture had to include **five** atomic orbitals around the nuclear, which have 2, 2, 1, 1 and 1 electrons, respectively.