

VA *The Nitrogen Group*

In order of increasing atomic number the members of group VA of the periodic table are:

nitrogen,
phosphorus,
arsenic,
antimony and
bismuth.

The elements of this group are characterized by the presence of five electrons in an outer shell. The similarities of chemical behaviour among the elements of this group are less striking than hold for some of the other groups (especially the alkali metals or the alkaline earths). Although all of the elements of this group have valences in addition to 5+, all do have the 5+ valence in common. Unlike the alkali metals of alkaline earths, for example, the elements of the nitrogen group are not so similar chemically that they comprise a separate group in classical qualitative chemical analysis separations. Three of the five, however, antimony, arsenic, and bismuth are members of the second group in terms of qualitative chemical analysis.