Topic Introduction

Summarize your understanding of each paragraph.

s, p, d, f and so on are the names given to the orbitals that hold the electrons in atoms. These orbitals have different shapes and energies.

A block of the periodic table of elements is a set of adjacent groups. The respective highest-energy electrons in each element in a block belong to the same atomic orbital type. Each block is named after its characteristic orbital; thus, the blocks are: s-block

The most common way to describe electron configurations is to write distributions in the spdf notation. Although the distributions of electrons in each orbital are not as apparent as in the diagram.

The s, p, d, and f stand for sharp, principal, diffuse and fundamental, respectively. The letters and words refer to the visual impression left by the fine structure of the spectral lines which occurs due to the first relativistic corrections, especially the spin-orbital interaction.