



Electron Shells

Electrons are small particles of an atom. They orbit around the atom's nucleus in pathways called shells. A small atom, with only a few electrons, only has one or two shells. Larger atoms, such as radium, have lots of electrons, and need more shells to hold them all. Chemists draw shells as rings around the nucleus.

Key Facts

- ✓ Electrons orbit the nucleus in shells.
- ✓ Each shell can hold a fixed maximum number of electrons.
- ✓ Electrons must fill their innermost shells first before filling their outer shells.

Electron shell rules

In atoms with 20 electrons or fewer, such as aluminum atoms, each shell can hold a fixed number of electrons.

