The Hydrogen Group.

The Helium, Lithium, Beryllium, Boron, Carbon, Nitrogen, and Oxygen Groups.

The Iron and Cobalt Groups.
Eight copies of the Hydrogen Hexanet encode 50% of all the natural elements with atomic number $\leq 96$. 

$H = \{1, 2\}$: 1 and 2 s-shell; others p-shell.

$H = \{3, 4\}$: All s-shell.

$H = \{5\}$: Double p- and quadruple d-shells.

$H = \{6, 7, 8\}$: Double p-, d-, and f-shells.

Element Total = 48

- s-shell = 14
- p-shell = 18
- d-shell = 10
- f-shell = 6