

Periodic Trends

Chemistry

The four main trends, and the reason behind each.

Direction across a period and down a group.

Trend	Across →	Down ↓
Atomic radius	Decreases	Increases
Ionisation energy	Increases	Decreases
Electronegativity	Increases	Decreases
Metallic character	Decreases	Increases
Electron affinity	Increases	Decreases

Across a period the nuclear charge rises while shielding stays roughly constant, so electrons are pulled in more tightly.