Atomic Radius vs Atomic Number: Elements 3 – 20

**generally decreasing**

1st period

2nd period

3rd period
Atomic Radius vs Atomic Number: Group IA and IIA

[Graph showing trends in atomic radius vs atomic number for Group IA and IIA elements, with notes: generally increasing and generally decreasing.]
Ionization Energy vs Atomic Number Elements 3-20

1st shell

2nd shell

Generally increasing

Single vs. double occupied p orbitals

S vs. p orbitals

Generally increasing
Ionization Energy vs Atomic Number: Group IA and IIA

Generally decreasing

generally increasing