

- Nuclear reactions determine element abundance...

- Is the earth homogeneous though?

- Is the solar system??

- Is the universe???

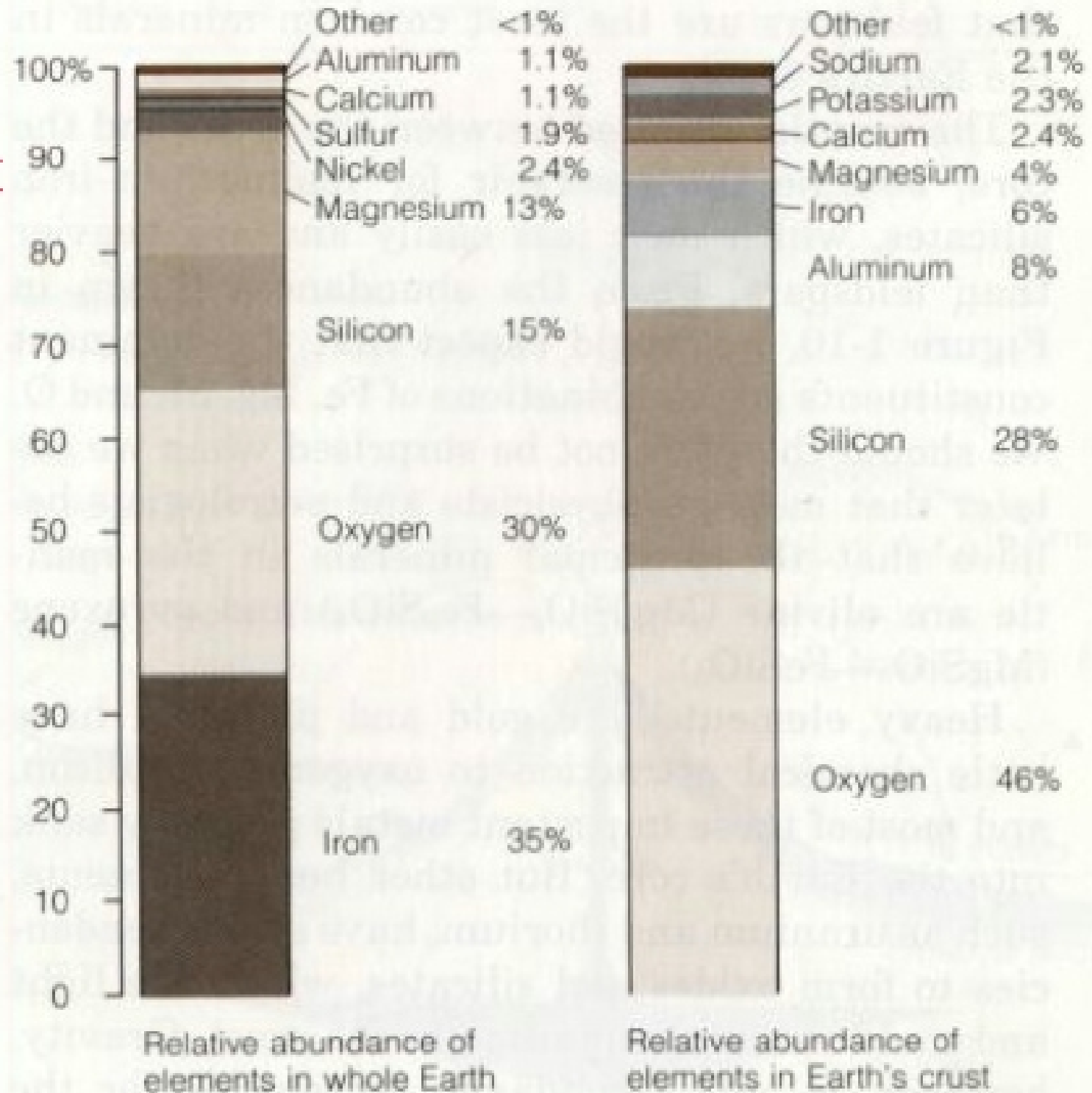
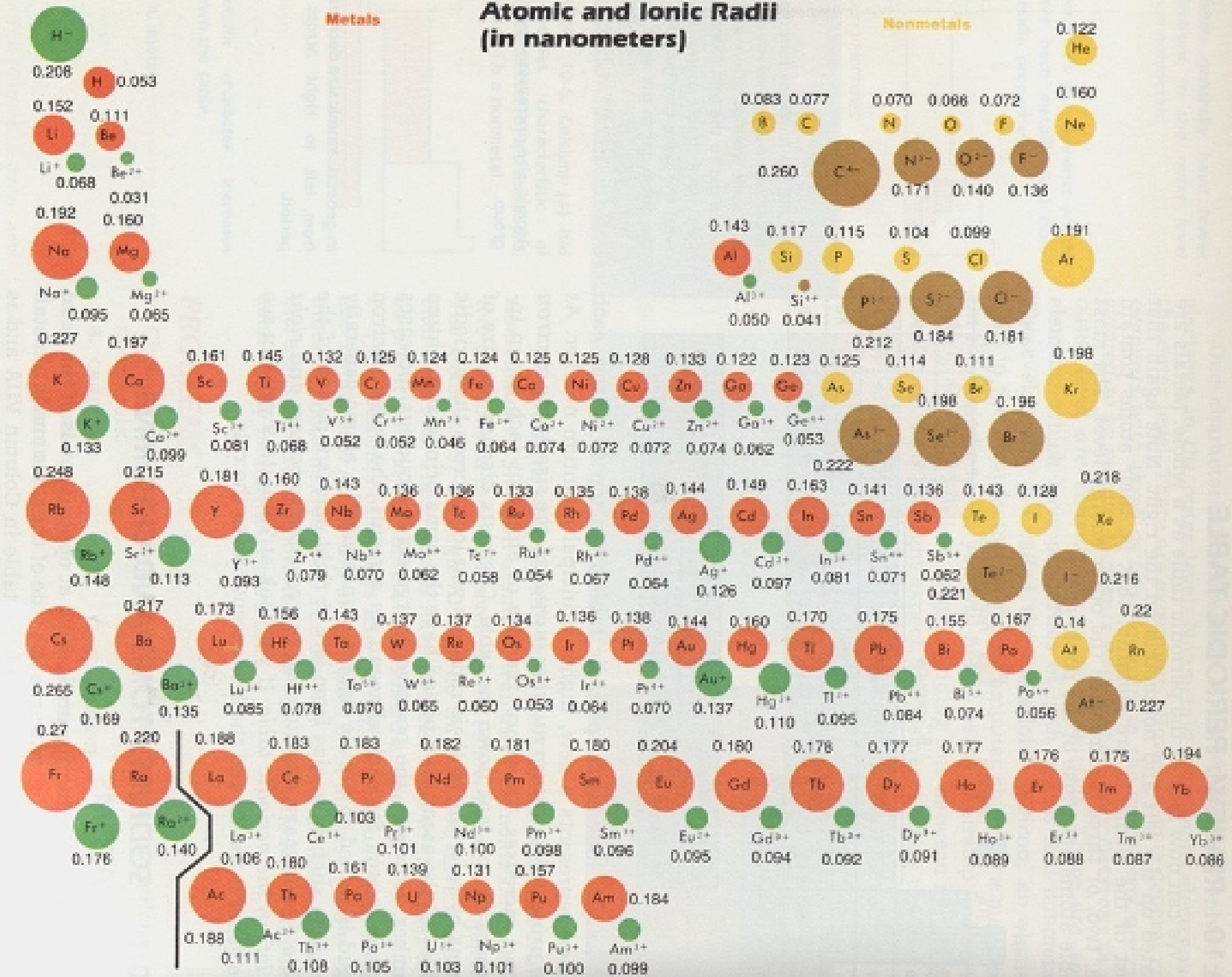


Table 10-9
Atomic and Ionic Radii
(in nanometers)



Earth = anion balls with cations in the spaces...

- View of the earth as a system of anions packed together → By size and abundance, Si and O are the most important
- If we consider anions as balls, then their arrangement is one of efficient packing, with smaller cations in the interstices
- Closest packed structures are ones in which this idea describes atomic arrangement – OK for metals, sulfides, halides, some oxides