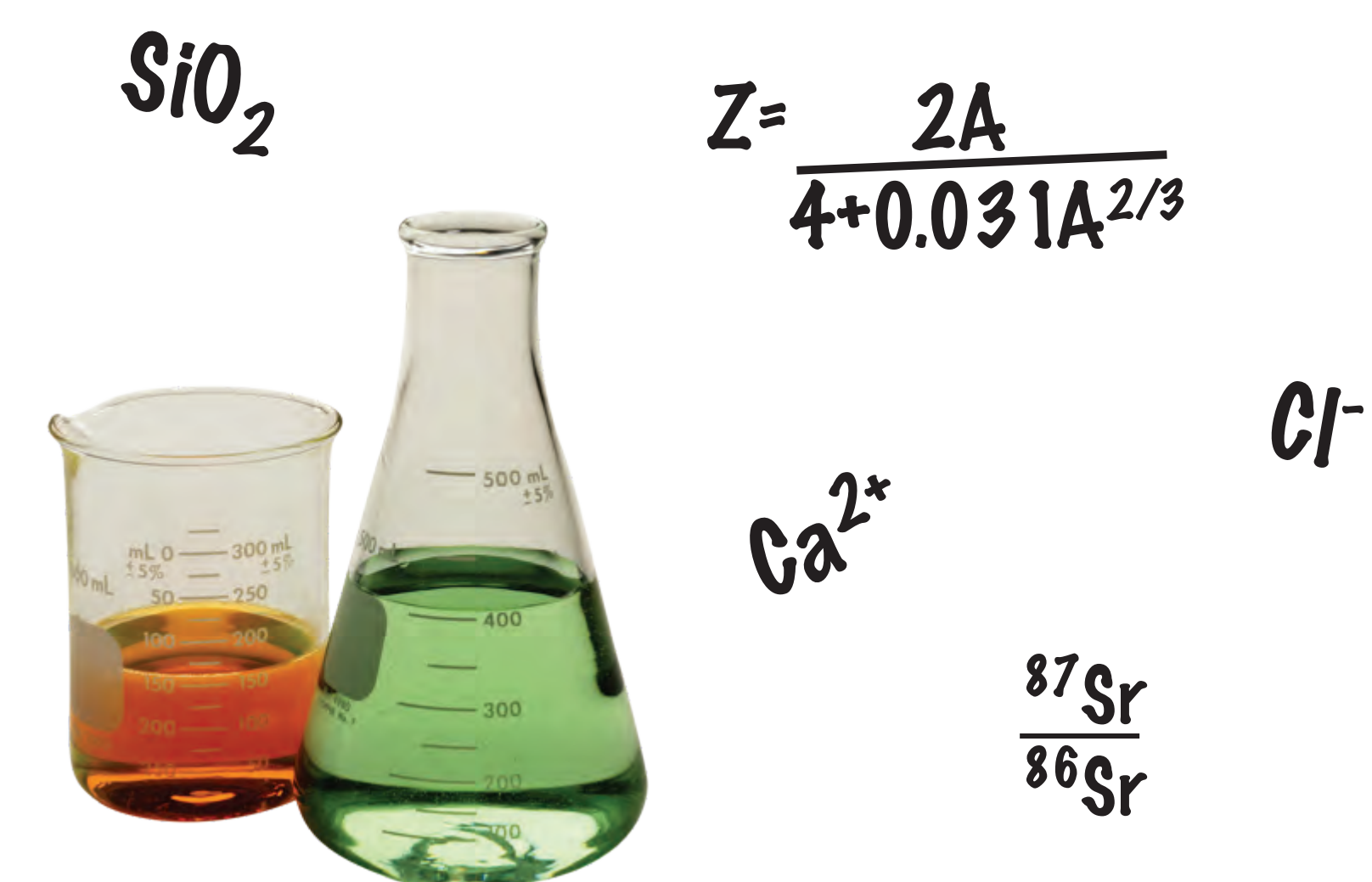


What is Geochemistry?



Geochemistry is the study of:

- the chemical composition of the Earth and other planets
- the chemical processes and reactions that govern the composition of rocks, water, and soils
- the cycles of matter and energy that transport the Earth's chemical components in time and space



Geochemistry encompasses research of:

- the solid Earth
- the hydrosphere (oceans, lakes, rivers)
- the biosphere
- the atmosphere
- the solar system



A geochemist's toolkit:

Geochemists use elemental abundances (major elements: percent range; trace elements: parts-per-million range) and isotopic ratios (like "fingerprints").



Did you know?

There are 90 naturally occurring chemical elements. 8 of them make up 99% of the mass of the Earth: Fe (32%), O (30%), Si (15%), Mg (14%), S (3%), Ni (2%), Ca (1.5%), Al (1.5%).



Geochemistry helps increase our understanding of:

- climate change
- mantle evolution
- planet formation
- the origin of mineral deposits
- the human impact on the environment

(...just to name a few.)

"geochemistry makes chemistry fun!"

