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Metalloregulatory proteins, here superimposed on the periodic table, act as metal-specific sensors that translate changes in metal ion concentration into changes in gene expression; elevations are proportional to the logarithm of the elemental abundances in the universe. Most of these proteins mediate metal-responsive transcription by RNA polymerase (top left). See page 715.

A special section on bioinorganic chemistry begins on page 701; see also the Perspective on page 699. [Image: Bryson Biomedical Illustrations]