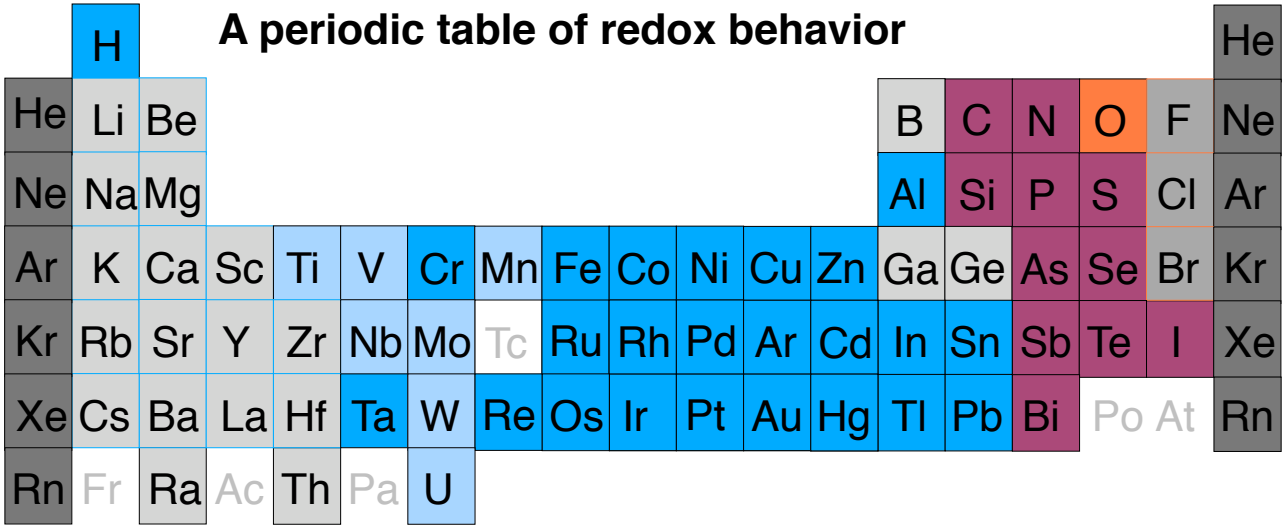
A periodic table of redox behavior

Atoms with positive charge (i.e. those with more electrons than protons) are chemically oxidized relative to their elemental condition.



Atoms with negative charge (i.e. those with more electrons than protons) are chemically reduced relative to their elemental condition.

Elements that exist in nature in just one positively charged state

For example, K^+ and Ca^{2+}.

Elements that exist in nature in more than one positively charged state

For example, Mo^{6+}, Mo^{4+}, & Mo^{2+}.

Elements that exist in nature in elemental (uncharged) form and in at least one positively charged state

For example, Fe^{3+}, Fe^{2+}, & Fe.

Elements that exist in nature in states ranging from positively charged to negatively charged

For example, S^{6+} to S^{2-}.

Elements that exist in nature in elemental (uncharged) form and in at least one negatively charged state

For example, O_2 to O^{2-}.

Elements that exist in nature in just one negatively charged state

For example, F^- and Cl^-.

Elements that exist in nature in no charged state at all (the noble gases)

Elements with no redox chemistry in nature

Elements with at least some redox chemistry in nature

(and thus with multiple forms that can't be shown on a one-cell-per-element table like this one, but shown in their multiple forms on the Earth Scientist's Periodic Table of the Elements and Their Ions)

Elements with no redox chemistry in nature