

ACROSS

- 1 The _____s are a series of nonmetal elements from Group 17 of the periodic table, comprising fluorine, F; chlorine, CI; bromine, Br; iodine, I; and astatine, At.
- 5 The _____ metals are a series of elements comprising Group 1 of the periodic table: lithium (Li), sodium (Na), potassium (K), rubidium (Rb), caesium (Cs), and francium (Fr).
- **10** _____ is a chemical property which describes the power of an atom to attract electrons towards itself.
- 12 The _____ mass is the mass of an atom at rest.
- 13 The term _____ metal commonly refers to any element in the d-block of the periodic table, including zinc, cadmium and mercury. This corresponds to groups 3 to 12 on the periodic table.
- **14** A chemical ______ is a type of atom that is defined by its atomic number; that is, by the number of protons in its nucleus.
- 15 The electron ______ of an atom or molecule is the energy required to detach an electron from a singly charged negative ion or, inversely, the energy released when an electron is attached to a neutral atom or molecule.

DOWN

- 2 The ______ earth metals are a series of elements comprising Group 2 of the periodic table: beryllium (Be), magnesium (Mg), calcium (Ca), strontium (Sr), barium (Ba) and radium (Ra).
- **3** A ______, also known as a family, is a vertical column in the periodic table of the chemical elements.
- **4** The _____ number or proton number is the number of protons found in the nucleus of an atom.
- 6 Dimitri _____ (1834 1907) was a Russian chemist credited as being the primary creator of the first version of the periodic table of elements.
- 7 The ______ table of the chemical elements is a tabular method of displaying the chemical elements credited to Russian chemist Dmitri Mendeleev in 1869.
- 8 The ______ energy of an atom or molecule is the energy required to remove one mole of electrons from one mole of isolated gaseous atoms or ions.
- **9** A chemical ______ is an abbreviation or short representation of the name of a chemical element, generally assigned in relation to its Latin name.
- 11 The _____ gases are the elements in group 18 of the periodic table. It is also called helium family or neon family.