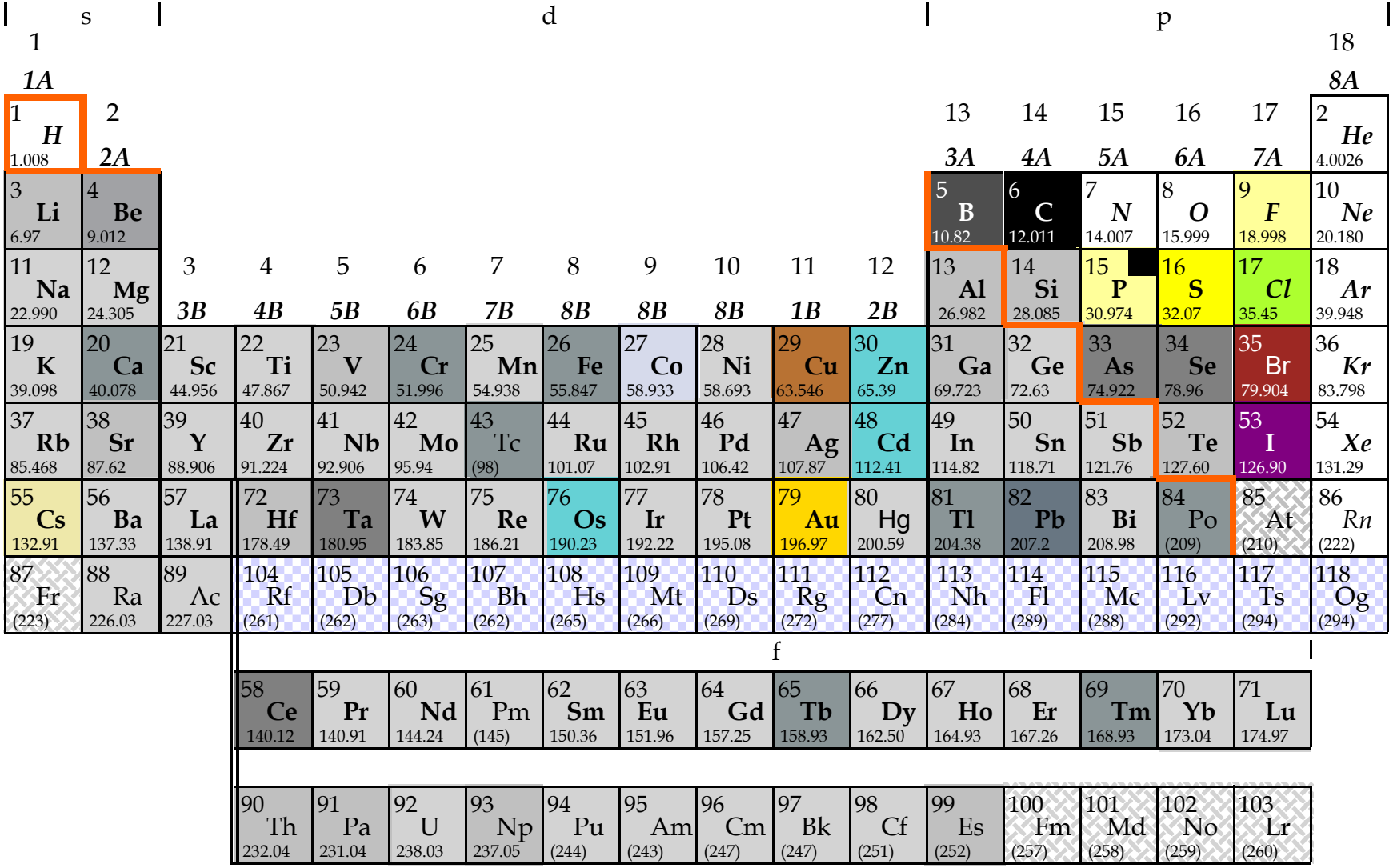
PERIODIC TABLE WITH ELEMENT COLORS



Key: bold or normal italics - gas, Ariel font - liquid, bold or normal - solid, normal print - all known isotopes are radioactive

Color unknown but most are silver or silver-white. Colors are from https://www.chemicool.com/ using RGB codes.

Table created and posted by Steven Murov (http://murov.info) in May, 2018.

A limited search for a periodic table with the colors of the elements has not yet located a table of this type. However, Theodore Gray has produced many wonderful tables including one with images of authentic samples of the elements (http://periodictable.com/) and a commercially available model that contains sample of most of the elements (http://www.periodictable.co.uk/). While the tables below are not nearly as fascinating or interesting as Gray's tables, the tables below have been designed to enable viewers to focus on the property of color. Most of the colors have been extracted from https://www.chemicool.com/ primarily because it often included a two word description of the color. Other sites referred to were Theodore Gray's http://periodictable.com/Properties/A/Color.html and Mark Winter's https://www.webelements.com/ . For some elements, the colors listed on Internet sites are not always in agreement. Rene Vernon, the author of a paper on metalloids, https://pubs.acs.org/doi/pdfplus/10.1021/ed3008457 has contributed valuable comments about the colors of boron, phosphorus, iodine, cesium and astatine. Some of these color issues are because the most stable allotrope (e.g., phosphorus) is not always the most abundant allotrope.

boron - the most stable allotrope of boron is the beta rhombohedral crystalline state. Colors reported for this state range from shiny silver-grey to grey to dark to black. It is represented as dark grey in the table.

phosphorus - the most stable allotrope is black but the most common form is described as white to pale yellow. A very light yellow has been used below with a black insert.

iodine - while silver is sometimes mentioned, the overwhelming consensus is that iodine crystals are in the violet or purple range.

astatine - although astatine has been observed, due to its transient existence, it has apparently not been possible to determine its color. Some web sites conclude that it should have some metallic properties and as a result have a silvery color. Other web sites suggest as progression is made down group 7A (17), the color continuously darkens with a presumption that astatine should be near black. It is left in these tables as unknown like francium and the elements with atomic numbers above 99.