| 1 |  | Periodic Table of Elements |  |  |  |  |  | 18 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1****H**Hydrogen1.008 | 2 |  |  |  |  |  |  |  |  |  |  | 13 | 14 | 15 | 16 | 17 | **2****He**Helium4.003 |
| **3****Li**Lithium6.941 | **4****Be**Beryllium9.012 |  |  | **Key:** | **6****C**Carbon12.01 | Atomic NumberSymbolNameAverage Atomic Mass |  | **5****B**Boron10.81 | **6****C**Carbon12.01 | **7****N**Nitrogen14.01 | **8****O**Oxygen16.00 | **9****F**Fluorine19.00 | **10****Ne**Neon20.18 |
| **11****Na**Sodium22.99 | **12****Mg**Magnesium24.31 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | **13****Al**Aluminum26.98 | **14****Si**Silicon28.09 | **15****P**Phosphorus30.97 | **16****S**Sulfur32.07 | **17****Cl**Chlorine35.45 | **18****Ar**Argon39.95 |
| **19****K**Potassium39.10 | **20****Ca**Calcium40.08 | **21****Sc**Scandium44.96 | **22****Ti**Titanium47.88 | **23****V**Vanadium50.94 | **24****Cr**Chromium52.00 | **25****Mn**Manganese54.94 | **26****Fe**Iron55.85 | **27****Co**Cobalt58.93 | **28****Ni**Nickel58.69 | **29****Cu**Copper63.55 | **30****Zn**Zinc65.41 | **31****Ga**Gallium69.72 | **32****Ge**Germanium72.59 | **33****As**Arsenic74.92 | **34****Se**Selenium78.96 | **35****Br**Bromine79.90 | **36****Kr**Krypton83.80 |
| **37****Rb**Rubidium85.47 | **38****Sr**Strontium87.62 | **39****Y**Yttrium88.91 | **40****Zr**Zirconium91.22 | **41****Nb**Niobium92.91 | **42****Mo**Molybdenum95.94 | **43****Tc**Technetium(98) | **44****Ru**Ruthenium101.1 | **45****Rh**Rhodium102.9 | **46****Pd**Palladium106.4 | **47****Ag**Silver107.9 | **48****Cd**Cadmium112.4 | **49****In**Indium114.8 | **50****Sn**Tin118.7 | **51****Sb**Antimony121.8 | **52****Te**Tellurium127.6 | **53****I**Iodine126.9 | **54****Xe**Xenon131.3 |
| **55****Cs**Cesium132.9 | **56****Ba**Barium137.3 | **57****La**Lanthanum138.9 | **72****Hf**Hafnium178.5 | **73****Ta**Tantalum180.9 | **74****W**Tungsten183.9 | **75****Re**Rhenium186.2 | **76****Os**Osmium190.2 | **77****Ir**Iridium192.2 | **78****Pt**Platinum195.1 | **79****Au**Gold197.0 | **80****Hg**Mercury200.6 | **81****Tl**Thallium204.4 | **82****Pb**Lead207.2 | **83****Bi**Bismuth209.0 | **84****Po**Polonium(209) | **85****At**Astatine(210) | **86****Rn**Radon(222) |
| **87****Fr**Francium(223) | **88****Ra**Radium226 | **89****Ac**Actinium(227) | **104****Rf**Rutherfordium(267) | **105****Db**Dubnium(268) | **106****Sg**Seaborgium(269) | **107****Bh**Bohrium(270) | **108****Hs**Hassium(277) | **109****Mt**Meitnerium(278) | **110****Ds**Darmstadtium(281) | **111****Rg**Roentgenium(282) | **112****Cn**Copernicium(285) | **113****Nh**Nihonium(286) | **114****Fl**Flerovium(289) | **115****Mc**Moscovium(290) | **116****Lv**Livermorium(293) | **117****Ts**Tennessine(294) | **118****Og**Oganesson(294) |

|  |  |  | **58****Ce**Cerium140.1 | **59****Pr**Praseodymium140.9 | **60****Nd**Neodymium144.2 | **61****Pm**Promethium(145) | **62****Sm**Samarium150.4 | **63****Eu**Europium152.0 | **64****Gd**Gadolinium157.3 | **65****Tb**Terbium158.9 | **66****Dy**Dysprosium162.5 | **67****Ho**Holium164.9 | **68****Er**Erbium167.3 | **69****Tm**Thulium168.9 | **70****Yb**Ytterbium173.0 | **71****Lu**Lutetium175.0 |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **90****Th**Thorium232.0 | **91****Pa**Proctactinium231.0 | **92****U**Uranium238.0 | **93****Np**Neptunium(237) | **94****Pu**Plutonium(244) | **95****Am**Americium(243) | **96****Cm**Curium(247) | **97****Bk**Berkelium(247) | **98****Cf**Californium(251) | **99****Es**Einsteinium(252) | **100****Fm**Fermium(257) | **101****Md**Mendelevium(258) | **102****No**Nobelium(259) | **103****Lr**Lawrencium(262) |  |