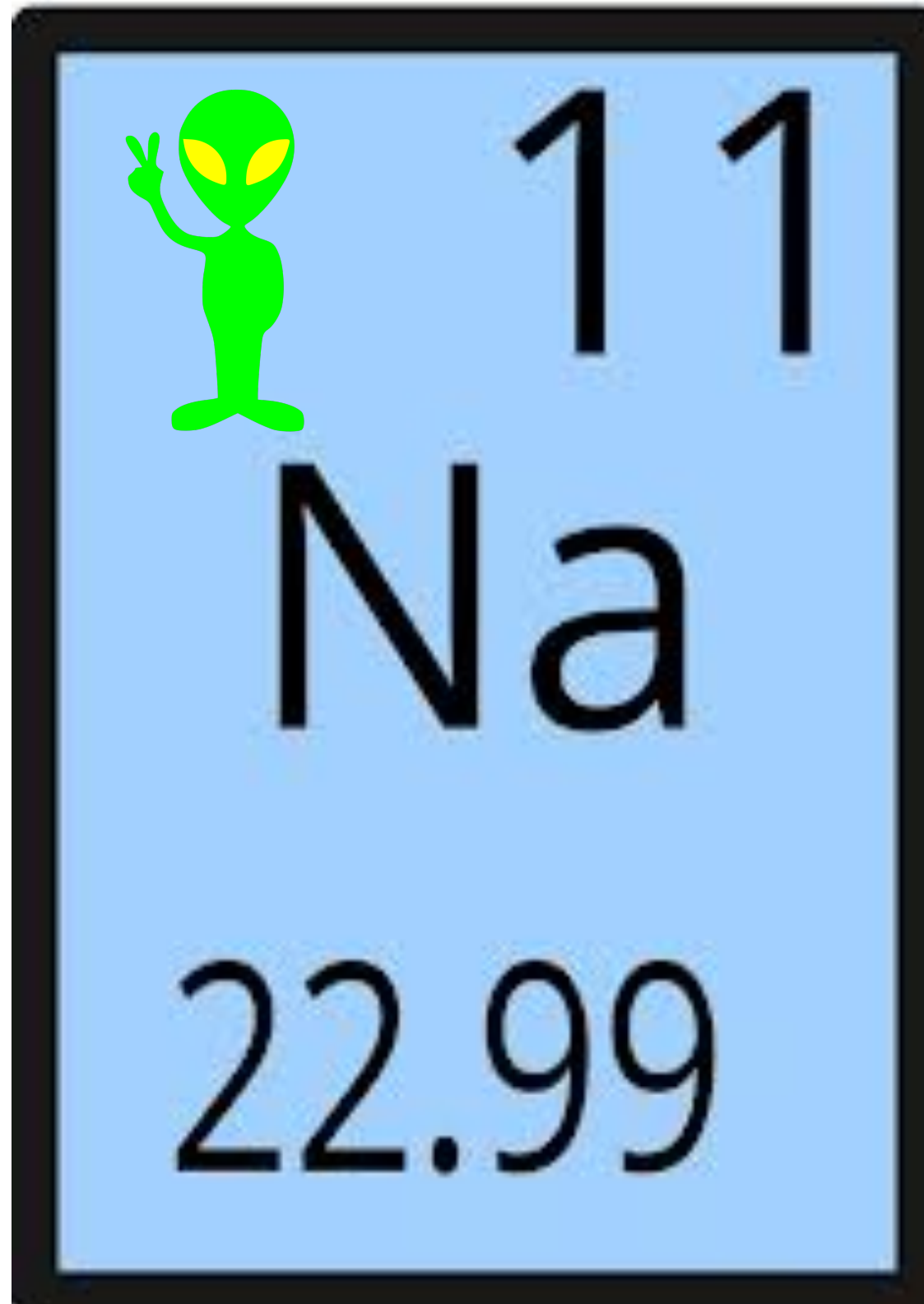
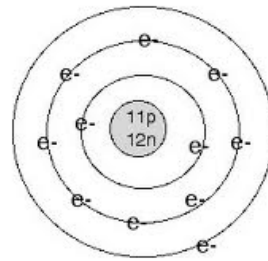


Natronlauge_(Sodium)

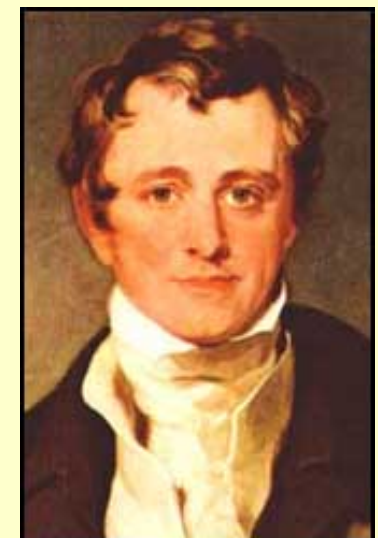


The Bohr Diagram!



Sodium's atomic number is eleven, and the atomic mass is twenty-three. Sodium has eleven protons, eleven electrons, and twelve neutrons. Sodium is a metal. It is in period 3, and belongs to family 1a, alkali metals.

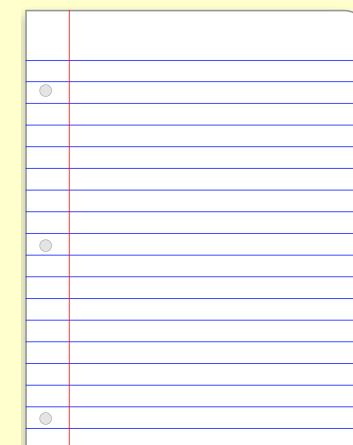
1 H Hydrogen 1.00794																	2 He Helium 4.003
3 Li Lithium 6.941	4 Be Beryllium 9.012182																
11 Na Sodium 22.989770	12 Mg Magnesium 24.3050																
19 K Potassium 39.0983	20 Ca Calcium 40.078	21 Sc Scandium 44.955910	22 Ti Titanium 47.867	23 V Vanadium 50.9415	24 Cr Chromium 51.9961	25 Mn Manganese 54.938049	26 Fe Iron 55.845	27 Co Cobalt 58.933200	28 Ni Nickel 58.6934	29 Cu Copper 63.546	30 Zn Zinc 65.39	31 Ga Gallium 69.723	32 Ge Germanium 72.61	33 As Arsenic 74.92160	34 Se Selenium 78.96	35 Br Bromine 79.904	36 Kr Krypton 83.80
37 Rb Rubidium 85.4678	38 Sr Strontium 87.62	39 Y Yttrium 88.90585	40 Zr Zirconium 91.224	41 Nb Niobium 92.90638	42 Mo Molybdenum 95.94	43 Tc Technetium (98)	44 Ru Ruthenium 101.07	45 Rh Rhodium 102.90550	46 Pd Palladium 106.42	47 Ag Silver 107.8682	48 Cd Cadmium 112.411	49 In Indium 114.818	50 Sn Tin 118.710	51 Sb Antimony 121.760	52 Te Tellurium 127.60	53 I Iodine 126.90447	54 Xe Xenon 131.29
55 Cs Cesium 132.90545	56 Ba Barium 137.327	57 La Lanthanum 138.9055	72 Hf Hafnium 178.49	73 Ta Tantalum 180.9479	74 W Tungsten 183.84	75 Re Rhenium 186.207	76 Os Osmium 190.23	77 Ir Iridium 192.217	78 Pt Platinum 195.078	79 Au Gold 196.96655	80 Hg Mercury 200.59	81 Tl Thallium 204.3833	82 Pb Lead 207.2	83 Bi Bismuth 208.98038	84 Po Polonium (209)	85 At Astatine (210)	86 Rn Radon (222)
87 Fr Francium (223)	88 Ra Radium (226)	89 Ac Actinium (227)	104 Rf Rutherfordium (261)	105 Db Dubnium (262)	106 Sg Seaborgium (263)	107 Bh Bohrium (262)	108 Hs Hassium (265)	109 Mt Meitnerium (266)	110 (269)	111 (272)	112 (277)	113 	114 	 	 	 	
58 Ce Cerium 140.116	59 Pr Praseodymium 140.90765	60 Nd Neodymium 144.24	61 Pm Promethium (145)	62 Sm Samarium 150.36	63 Eu Europium 151.964	64 Gd Gadolinium 157.25	65 Tb Terbium 158.92534	66 Dy Dysprosium 162.50	67 Ho Holmium 164.93032	68 Er Erbium 167.26	69 Tm Thulium 168.93421	70 Yb Ytterbium 173.04	71 Lu Lutetium 174.967				
90 Th Thorium 232.0381	91 Pa Protactinium 231.03588	92 U Uranium 238.0289	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)				



Properties

Sodium has a silver luster, and it is smooth. It is a solid at room temperature. The melting temperature of sodium is 97.72 degrees Celsius. The boiling temperature is 883 degrees Celsius! Wow!

Sodium is found in the compounds NaCl, table salt, NaOH, caustic soda, and also NaHCO_3 , which is baking soda. It is also used for glass, soap, paper, and to purify molten metals. Sodium is obtained by being chemically separated from a compound.



Isotopes

Sodium has 18-22 isotopes, because opinions differ. There are many isotopes, but only one of them is stable. Isotope-24 is used to study the electrolytes in the body.

Sodium-18 : 1.3×10^{-21}

Sodium-19 : < 40 nanoseconds

Sodium-20 : 447.9 milliseconds

Sodium-21 : 22.49 seconds

Sodium-22 : 2.6027 years

Sodium-23 : stable

Sodium-24 : 14.997 hours

Sodium-25 : 59.1 seconds

Sodium-26 : 1.07128 seconds

Sodium-27 : 301 milliseconds

Sodium-28 : 30.5 milliseconds

Sodium-29 : 44.9 milliseconds

Sodium-30 : 48 milliseconds

Sodium-31 : 17 milliseconds

Sodium-32 : 13.2 milliseconds

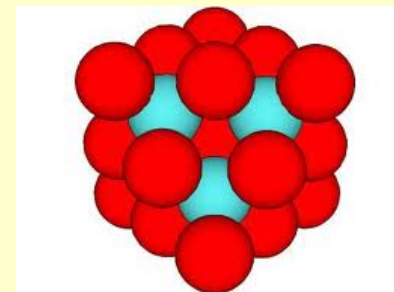
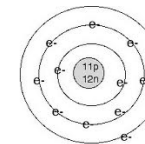
Sodium-33 : 8 milliseconds

Sodium-34 : 5.5 milliseconds

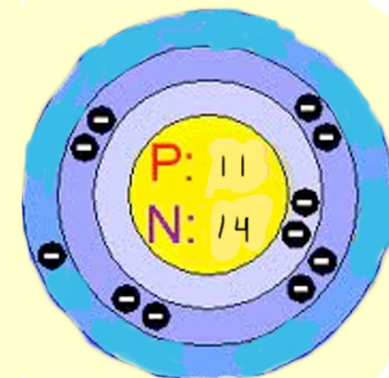
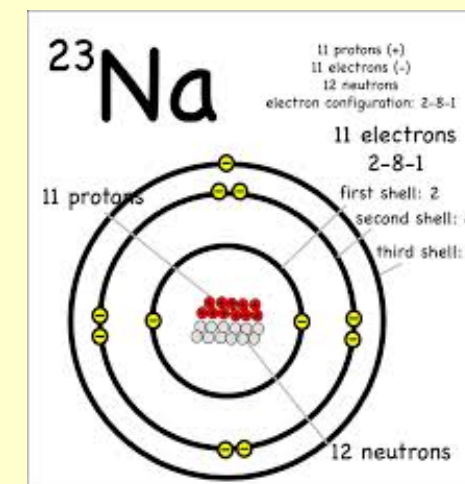
Sodium-35 : 1.5 milliseconds

Sodium-36 : <180 nanoseconds

Sodium-37 : >60 nanoseconds



Sodium 23



Fun Facts

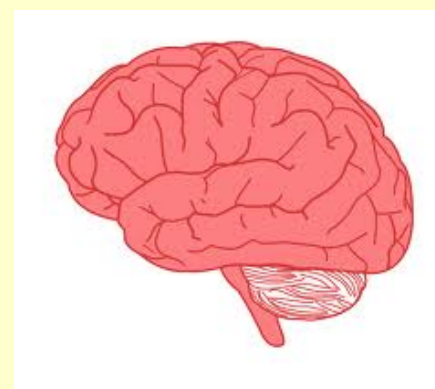
Sodium is the sixth most abundant element on Earth.

If you ate sodium, it would kill you. But, if the two dangerous elements, sodium and chlorine combined, it would create NaCl, or sodium chloride. This is also called table salt.

Neurons in the brain are like sodium batteries. Without sodium ions, you wouldn't be able to think. You would die without them.

Sodium reacts with both water and air. If it comes in contact with oxygen, a crust of sodium oxide. Sodium reacts explosively with water. Fire forms, and they give off the gas hydrogen.

Yellow sodium oxide crust!



Sodium Exploding in Water



Do not try this at home!