

H
Hydrogen
1.008
Gas

Hydrogen is lightweight, highly reactive, and combines easily with other elements by becoming a positively charged ion.

Li
Lithium
6.941
Solid

Lithium is silver-colored and reacts with water. It has the highest specific heat among metals and is the lightest.

Be
Beryllium
9.012
Solid

One of the lightest of all metals, beryllium has one of the highest melting points. It has high thermal conductivity.

B
Boron
10.811
Solid

Boron is a poor conductor of electricity at room temperature, improving at high temperature. It conducts heat well and burns with a green color.

C
Carbon
12.011
Solid

Carbon forms compounds readily, bonding with itself or other elements by sharing electrons.

N
Nitrogen
14.007
Gas

Nitrogen is colorless and odorless as a gas or liquid, generally non-reactive as a gas, and turns to liquid at -196 °C.

O

Oxygen

15.999

Gas

Oxygen is colorless, odorless, and tasteless. It promotes combustion and forms compounds readily.

F

Flourine

18.998

Gas

Flourine is the most electronegative and most reactive of all elements. A corrosive, it reacts with most substances by removing their electrons.

Na

Sodium

22.990

Solid

Sodium is a soft, bright, silvery metal always found in compounds as a positive ion. Freshly cut, it ignites on contact with water.

Mg

Magnesium

24.305

Solid

Magnesium is a light, silvery-white, fairly tough metal. Magnesium powder burns easily with a dazzling white flame.

Al

Aluminum

26.982

Solid

Aluminum is light, nonmagnetic, and nonsparking. It is the second-most malleable and sixth-most ductile metal.

Si

Silicon

28.086

Solid

Silicon is relatively inert, but it is attacked by halogens and dilute alkali. It occurs in sand and is a good conductor of heat.

P

Phosphorus

30.974

Solid

Existing in several forms and colors, phosphorus is insoluble in water. It burns spontaneously in air.

S

Sulfur

32.066

Solid

Sulfur is pale yellow, odorless, brittle solid, and insoluble in water. It exists in many forms.

Cl

Chlorine

35.453

Gas

Chlorine is a poisonous, greenish-yellow gas. In nature it is only found in compounds, often with sodium.

K

Potassium

39.098

Solid

Potassium is soft, easily cut with a knife, and a fresh surface is silvery. Never found uncombined, it forms positive ions.

Ca

Calcium

40.078

Calcium has a silvery color and is rather hard. It reacts with water and burns yellow-red.

Ti

Titanium

47.88

Solid

Titanium is a lustrous, white metal. It has a low density, good strength, is easily fabricated, and has excellent corrosion resistance.

V

Vanadium

50.942

Solid

Pure vanadium is a bright, white metal and is soft and ductile. It has good structural strength and resists corrosion.

Cr

Chromium

51.996

Solid

Chromium, a steel-gray metal, is lustrous, hard, takes a high polish, and has a high melting point. All its compounds are colored.

Mn

Manganese

54.938

Solid

Manganese is gray-white, harder than iron, and very brittle. It decomposes cold water slowly.

Fe

Iron

55.847

Solid

Iron is very reactive and rapidly corrodes, especially in moist air or at high temperatures. It is hard, brittle, and readily forms alloys.

Ni

Nickel

58.693

Solid

Nickel is silvery white and takes on a high polish. It is hard, malleable, ductile, and a fair conductor of heat and electricity.

Cu

Copper

63.546

Solid

Copper is reddish and has a bright luster. It is malleable, ductile, and conducts heat and electricity well.

Zn
Zinc
65.39
Solid

Zinc is bluish-white, lustrous, and a fair conductor of electricity. Brittle at room temperature, it is malleable at 100 - 150 °C.

As
Arsenic
74.922
Solid

Arsenic is a steel gray, very brittle, crystalline, semimetallic solid; it tarnishes in air, and when heated, has the odor of garlic.

Se
Selenium
78.96
Solid

Selenium exists in several different crystal forms. The most stable variety is a metallic gray. It converts light to electricity.

Br
Bromine
79.904
Liquid

Red-brown as a liquid, bromine evaporates at room temperature to an irritating reactive vapor. Take maximum safety precautions.

Rb
Rubidium
85.468
Solid

Rubidium can be liquid at room temperature. A soft, silvery-white metal, it ignites in air and reacts violently with water.

Sr
Strontium
87.62
Solid

Strontium decomposes in water readily. Strontium flakes ignite spontaneously in air and burn crimson.

Y
Yttrium
88.906
Solid

Yttrium has a silver-metallic luster and is relatively stable in air. Yttrium flakes are very unstable in air.

Zr
Zirconium
91.224
Solid

Zirconium is exceptionally resistant to corrosion by many common acids and alkalis. It is grayish-white and lustrous.

Nb
Niobium
92.906
Solid

Niobium is a shiny white, soft, ductile metal. It becomes bluish when exposed to room temperature for a long time.

Mo
Molybdenum
95.94
Solid

Molybdenum is a silvery white, very hard metal, but is softer and more ductile than tungsten. It has the third highest melting point.

Ru
Ruthenium
101.07
Solid

Ruthenium is a hard, white metal and has four crystal structures. It does not tarnish at room temperatures, but oxidizes explosively.

Rh
Rhodium
102.906
Solid

Rhodium is silvery white and, at red heat, slowly oxidizes in air. It is hard, durable, and highly reflective.

Pd
Palladium
106.42
Solid

Palladium is steel-white, does not tarnish in air, and has a relatively low density and melting point. It readily absorbs hydrogen.

Ag
Silver
107.868
Solid

Pure silver has a brilliant white luster. Very ductile and malleable, it has the highest electrical and heat conductivity among metals.

Cd
Cadmium
112.411
Solid

Cadmium is a soft, toxic, bluish-white metal, easily cut with a knife.

In
Indium
114.82
Solid

Indium is a very soft, silvery-white metal with a brilliant luster and gives a high-pitched "cry" when bent.

Sn
Tin
118.710
Solid

Tin is silver-white, malleable, somewhat ductile, and is a highly crystalline structure. When bent, these crystals break and emit sound.

Sb
Antimony
121.757
Solid

Antimony is a poor conductor of heat and electricity. Antimony and many of its compounds are toxic.

Te
Tellurium
127.60
Solid

Crystalline tellurium is silvery-white and has a metallic luster. Brittle and easily pulverized, it is a semi-conductor.

Cs
Cesium
132.905
Solid

Cesium is silvery white, soft, and ductile. It is the least electronegative and most alkaline element.

Ba
Barium
137.327
Solid

Barium is soft and silvery white. It is decomposed by water and alcohol and oxidizes very easily.

La
Lanthanum
138.906
Solid

Lanthanum is silvery white, malleable, ductile, and can be cut with a knife. It is very reactive, being attacked by hot water.

Ce
Cerium
140.115
Solid

Cerium is an iron-gray, lustrous metal. It oxidizes very readily at room temperature, especially in moist air, and burns if scratched.

Co
Cobalt
58.9332
Solid

Cobalt is a hard, brittle metal whose physical properties (e.g., melting point) varies widely. It resists oxidation.

Ta
Tantalum
180.948
Solid

Tantalum is a gray, heavy, ductile, very hard metal. It is almost completely immune to chemical attack below 150 °C.

W
Tungsten
183.85
Solid

Pure tungsten is a steel-gray to tin-white metal & has the highest melting point of all metals. It oxidizes in air, but resists acid corrosion.

Os
Osmium
190.2
Solid

Osmium is lustrous, bluish white, extremely hard, and brittle, even at high temperatures.

Ir
Iridium
192.22
Solid

Iridium is a white metal with a slight yellowish cast. Very hard and brittle, it is the most corrosion-resistant metal.

Pt
Platinum
195.08
Solid

Platinum is a beautiful silvery-white metal and is malleable and ductile. It does not form oxides in air at any temperature.

Au
Gold
196.967
Solid

Gold may look yellow, black, ruby, or purple. The most malleable & ductile metal, it conducts heat & electricity well, and is not very reactive.

Hg
Mercury
200.59
Liquid

Mercury, the only common metal that is liquid at ordinary temperatures, is a poor conductor of heat. It readily forms alloys with many metals.

Tl
Thallium
204.383
Solid

When freshly exposed to air, thallium has a metallic luster, but soon develops a bluish-gray tinge. Very malleable, it can be cut with a knife.

Pb
Lead
207.2
Solid

Lead is bluish-white with a bright luster, very soft, highly malleable, ductile, a poor electrical conductor, and resists corrosion.

Bi
Bismuth
208.980
Solid

Bismuth is a white, crystalline, brittle metal with a pinkish tinge. It occurs in nature in an uncombined form.

Th
Thorium
232.038
Solid

Pure thorium is a silvery-white metal that is air-stable and retains its luster for several months without tarnishing.

U
Uranium
238.036
Solid

Uranium is a heavy, malleable, ductile, silvery-white metal. It oxidizes in air, and when finely powdered, is attacked by cold water.

I
Iodine
126.9045
Solid

Iodine is a blue-black, lustrous crystal that turns to an irritating purple gas at room temperature.

Yb
Ytterbium
173.04
Solid

Ytterbium is a soft silvery metal that dissolves in dilute acids and reacts slowly with water.

Sc
Scandium
44.9559
Solid

A soft, light, silver-white metal, scandium turns yellow or pink in the air. It has a high melting point.

Ga
Gallium
69.72
Solid

Gallium can be liquid near room temperatures. A silvery metal, it expands when solidifying.

Ge
Germanium
72.59
Solid

Germanium, a brittle gray-white crystal, is a semiconductor.