

Like any discipline of science, chemistry has its own nomenclature or system of naming.

Most of the available etymological information can be obtained from a dictionary or a chemical handbook, but neither points out the fact that there are many similarities and trends among the names. For example, many people immediately notice that a few elements are named after famous scientists. What they may not realize, however, is that a few elements are named after prominent mythological figures, too.

To illustrate these patterns better, this file has grouped the elements in some categories according to the origins of their names.

The origins of the names of antique and prehistoric elements cannot be derived. Nine elements were known in ancient time.

Metal	Latin	Non-metal	Latin
Gold	Aurum	Carbon	Carbo
Silver	Argentum	Sulfur	Sulfur
Mercury	Hydrargyrum		
Copper	Cuprum		
Iron	Ferrum		
Tin	Stannum		
Lead	Plumbum		

The most important elements from the time of the alchemists have names with known meanings.

Element	Named after	Language	Meaning
Arsenic	Arsenikos	Greek	Male; masculine
Antimony	Anti monos	Greek	Not alone. Not one
Bismuth	Weisse Masse	German	White matter; white metal
Phosphorus	Phosphorous	Greek	Light-carrier. Venus as morning star

## Many elements have been named after celestial bodies.

Element	Named after	Language	Meaning
Helium	Helios	Greek	Greek word for the sun. Helium was observed in 1868 in radiation from the sun. It was not discov- ered on earth until 1895
Selenium	Selene	Greek	The moon
Tellurium	Tellus	Latin	The earth
Cerium	Ceres	Latin	One of the minor planets between Mars and
			Jupiter, discovered in 1801. The metal cerium was
			discovered in 1803
Palladium	Pallas	Greek	Asteroid discovered in 1802. The new element was
			discovered in 1803

Greek and Nordic mythology have contributed some element names. I seems to have been **Klaproth** who first used mythological names for elements.

Element	Named after
Uranium	Uranos, the first world ruler according to Greek mythology
Titanium	The Titans, sons of Uranos and the earth goddess Gaia in Greek mythology
Vanadium	The goddess Vanadis in Nordic mythology
Tantalum	Tantalus, son of Zeus in Greek mythology
Niobium	Niobe, daughter of Tantalus
Thorium	Thor, the god of thunder in Nordic mythology
Promethium	Prometheus, who in Greek mythology stole fire from the gods and gave it to humankind
Neptunium	Neptune, the god of the sea in Roman mythology
Plutonium	Pluto, god of the dead in Roman mythology. A Latin counterpart of the Greek god Hades

During chemical reactions preceding the discovery of an element, chemists have often observed the characteristic color of an element or its mineral so, many elements have names that express their color and color variations.

Element Named after		Language	Meaning	
Cesium	Cæsius	Latin	Sky-blue	
Chlorine	Chloros	Greek	Greenish-yellow	
Chromium	Chroma	Greek	Color	
Indium	Indigo	Latin	The blue color indigo	
Iodine	Iodes	Greek	Violet	
Iridium	Iris	Greek	Rainbow	
Praseodymium	Prasios didymos	Greek	Green twin	
Rubidium	Rubidus	Latin	Darkest red	
Zirconium	Zargun	Persian	Gold colored	

# In many cases the discoverer of an element has wished to recall his country or a province, a place or a river. (geographical names)

Element	Named after
Alkaline earth metals	
Magnesium	Magnesia, a region in Thessaly in Greece
Strontium	Strontian, town in Scotland
Rare earth metals	
Scandium	Scandinavia
Yttrium	Ytterby
Europium	Europe
Terbium	Ytterby
Erbium	Ytterby
Thulium	Old Roman name for the far north of Scandinavia
Ytterbium	Ytterby
Holmium	Stockholm
Lutetium	Lutetia, an old name for Paris

Copper	Cyprus
Gallium	Gallia, France
Germanium	Germany
Ruthenium	Ruthenia, Russia
Hafnium	Hafnia, Copenhagen
Rhenium	The river Rhine
Polonium	Poland
Transuranic elements	R.
Americium	The Americas, America
Berkelium	Berkeley in California
Californium	California
Darmstadtium	Darmstadt in Germany

## The noble gases have names indirectly to their origin or properties.

Noble gas	Meaning of the name	Noble gas	Meaning of the name
Helium	From the sun	Krypton	Hidden
Neon	New	Xenon	Stranger
Argon	Slow, lazy	Radon	From radium

### Personal names are used in the etymology of element names.

- Curium after Marie and Pierre Curie.
- Einsteinium after Albert Einstein
- Fermium after Enrico Fermi
- Mendelevium after Dmitrij Mendelejev
- Nobelium after Alfred Nobel
- Lawrencium after Ernest O. Lawrence, the inventor of the cyclotron

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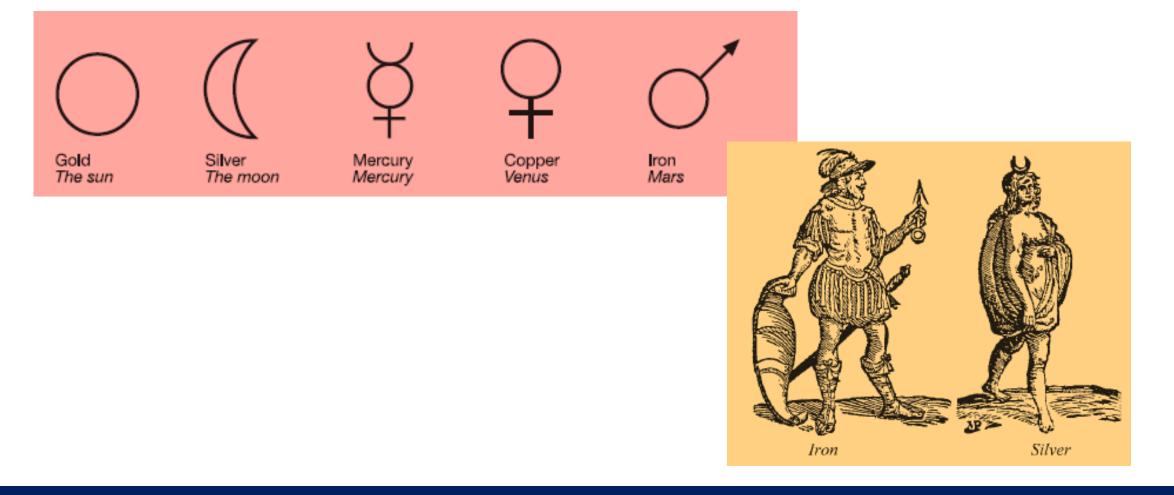
Rutherfordium after Ernest Rutherford

Bohrium after Niels Bohr

Meitnerium after Lise Meitner

Roentgenium after Wilhelm Conrad Röntgen

The seven metals in antiquity early became connected with the symbols for heavenly bodies. These symbols (and many others for compounds) were used by the alchemists and also by artists.



During the powerful development of chemistry in the 18th century the need for appropriate symbols for the elements became obvious. Berzelius in 1813 formulated a simple, brilliant proposal: "Let the first letter in the name of the element be the symbol! Or two letters from the element's name. But select the letters from the Latin name of the element. Then it will be intelligible in all countries".

Element	Latin Name	Chemical Symbol	Element	Latin name	Chemical symbol
Iron	Ferrum	Fe	Hydrogen	Hydrogen	Н
Copper	Cuprum	Cu	Oxygen	Oxygen	0
Gold	Aurum	Au	Nitrogen	Nitrogen	N
Silver	Argentum	Ag	Chlorine	Chloros (Greek)	Cl
Lead	Plumbum	Pb	Silicon	Silicis silex	Si
Mercury	Hydrargyrum	Hg	Carbon	Carbo	С
Tin	Stannum	Sn	Sulfur	Sulphur	S



#### Info.

Prepared by: Kamran Khodaparasti Publication date: March 2024

kkhodaparasti@yahoo.com
kamrankhodaparasti.ir
Kamran Khodaparasti

#### Ref.

Encyclopedia of the Elements, Per Enghag, 2004 Elemental Etymology, David W. Ball, 2011