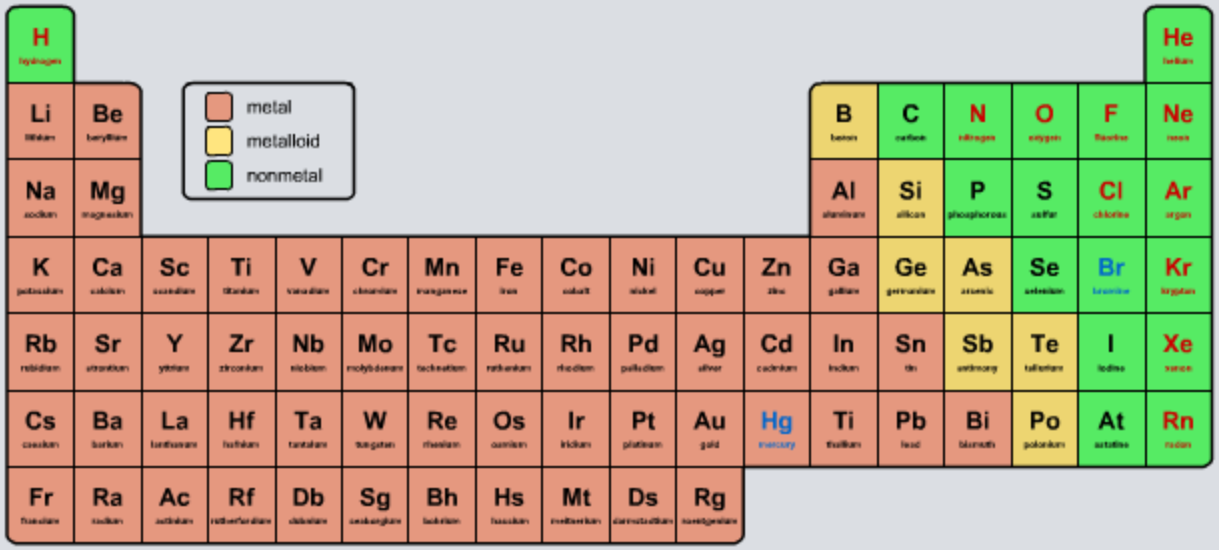
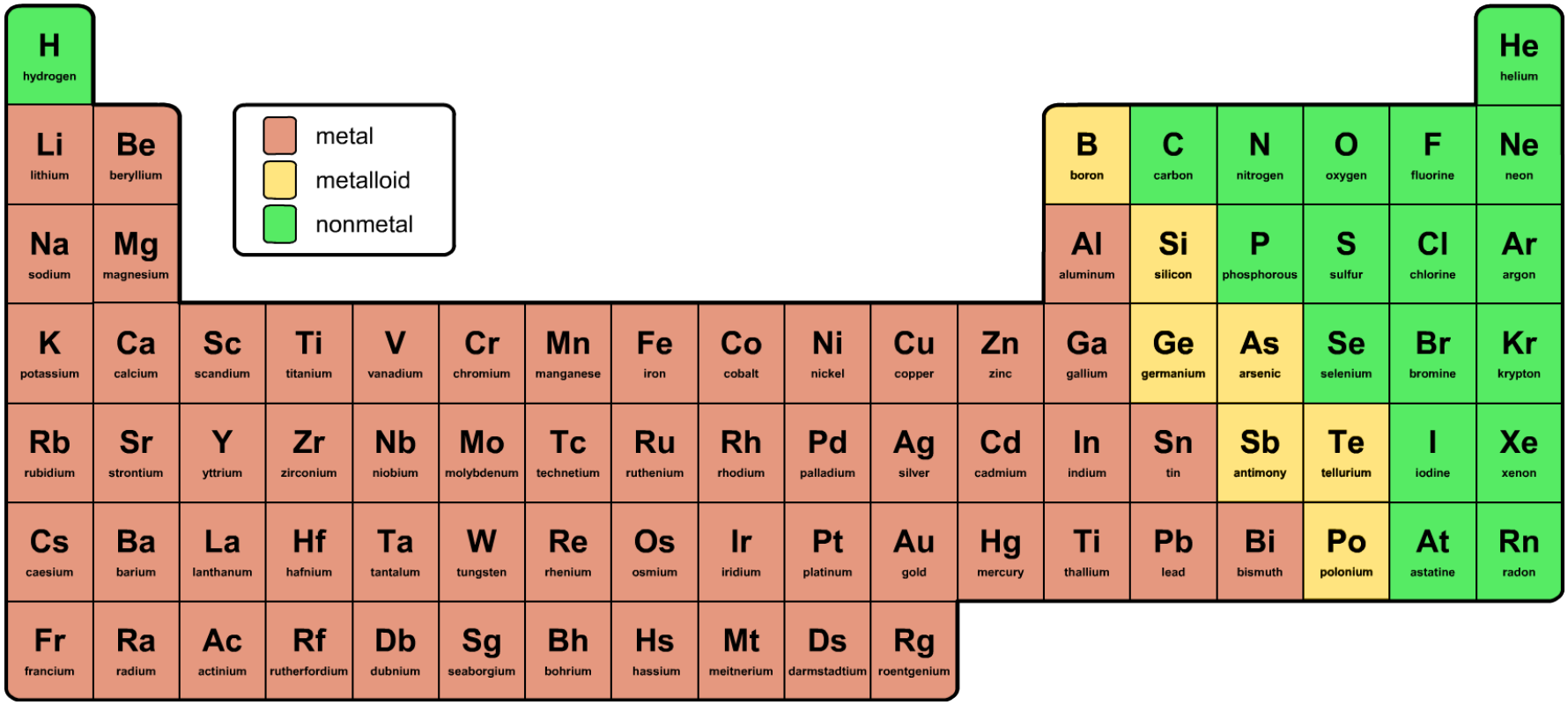
The Periodic Table



The periodic table

All the known elements are shown in the periodic table.



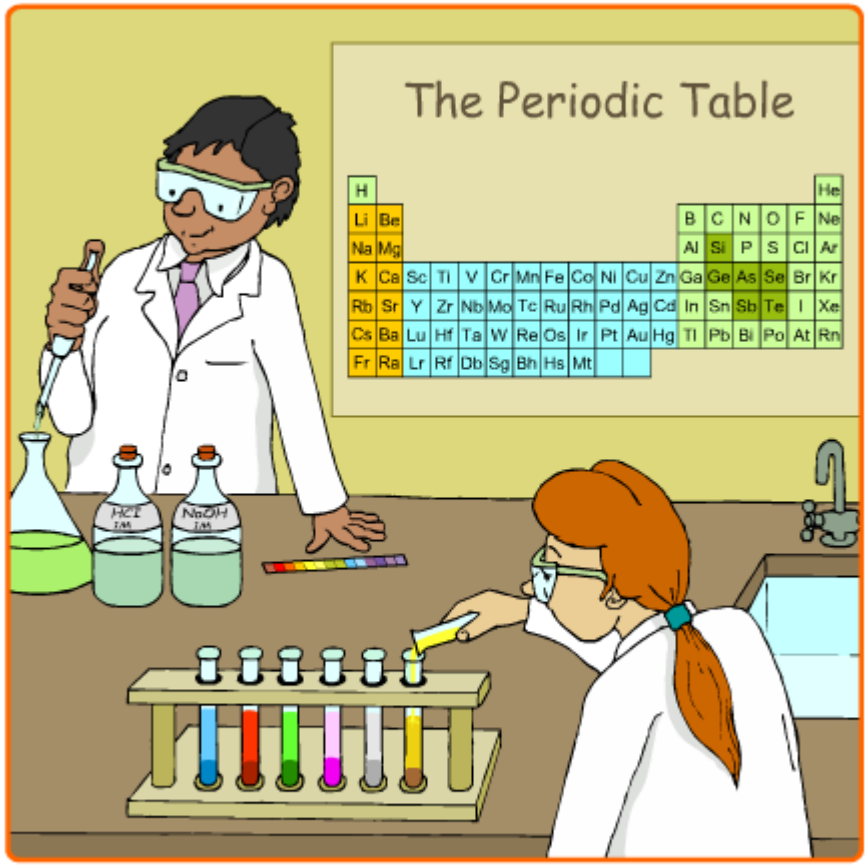
Can you see any patterns in how the elements are arranged in the periodic table?

Who invented the periodic table?

The Development of the Periodic Table

The development of the modern periodic table is the result of many scientists all over the world trying to find order among the elements.

Click "**start**" to find out more about how the elements were arranged into the periodic table.

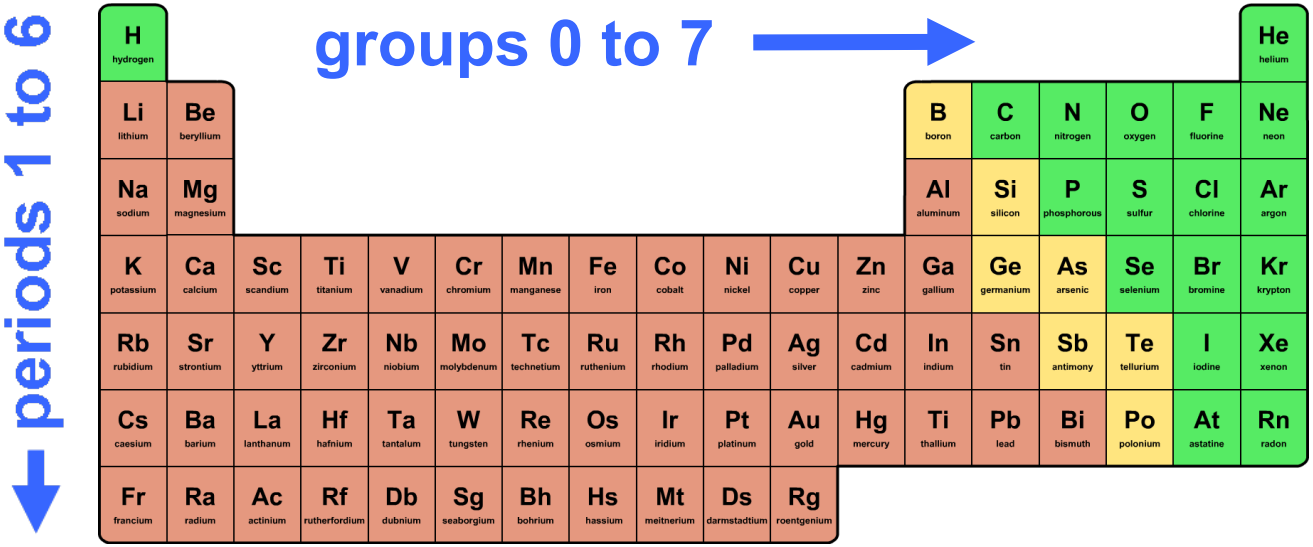


start

How are the elements arranged?

The elements in the periodic table are arranged in families called **groups** and **periods**. A group is a vertical column in the periodic table; a period is a horizontal row.

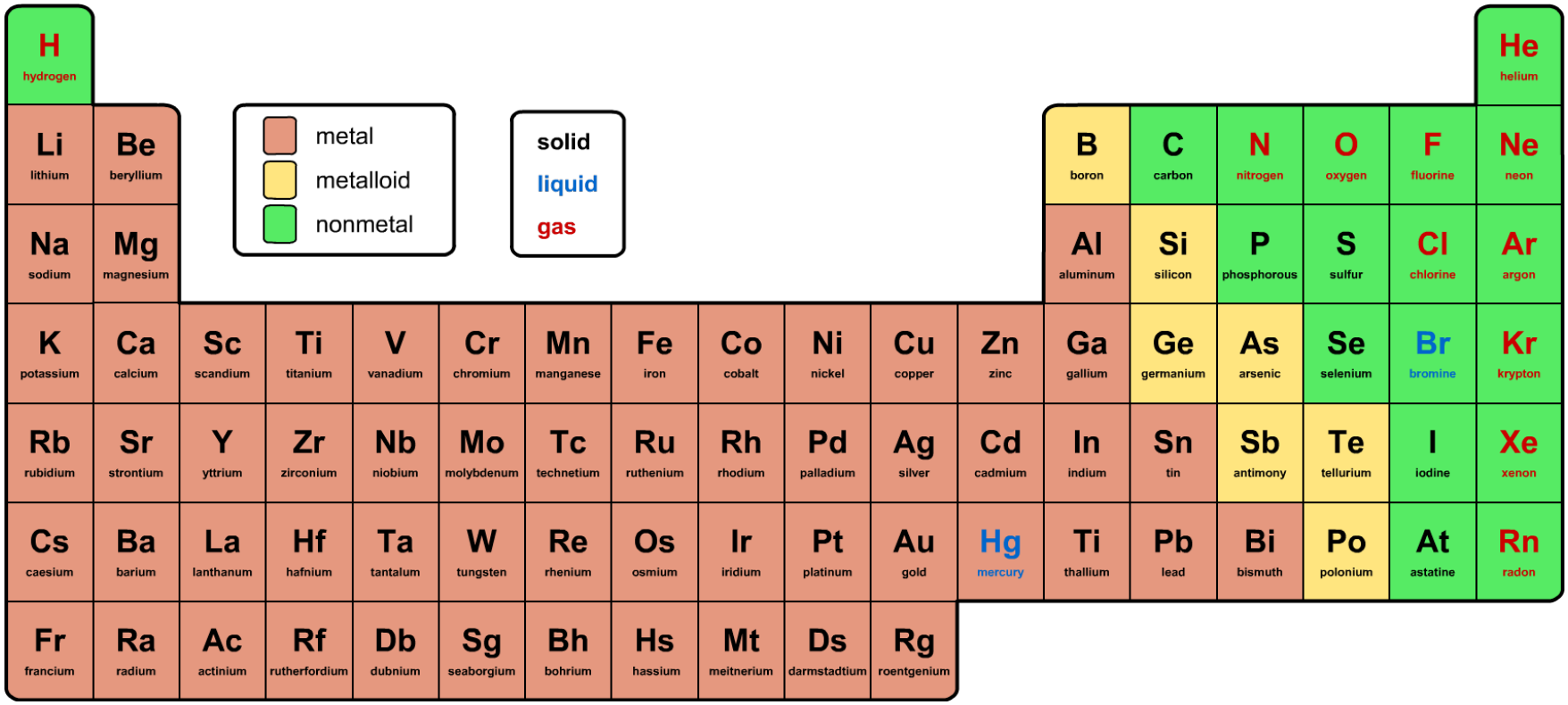
The elements in groups tend to have similar properties.



For example, all the elements in group 0 are very unreactive gases at room temperature, while all the elements in group 1 are very reactive metals.

Solids, liquids and gases

Why are some symbol names in the periodic table below shown in different colors? (clue: think about group properties)



Bromine and mercury are liquids at room temperature; all the other elements are solids or gases.

Metalloids

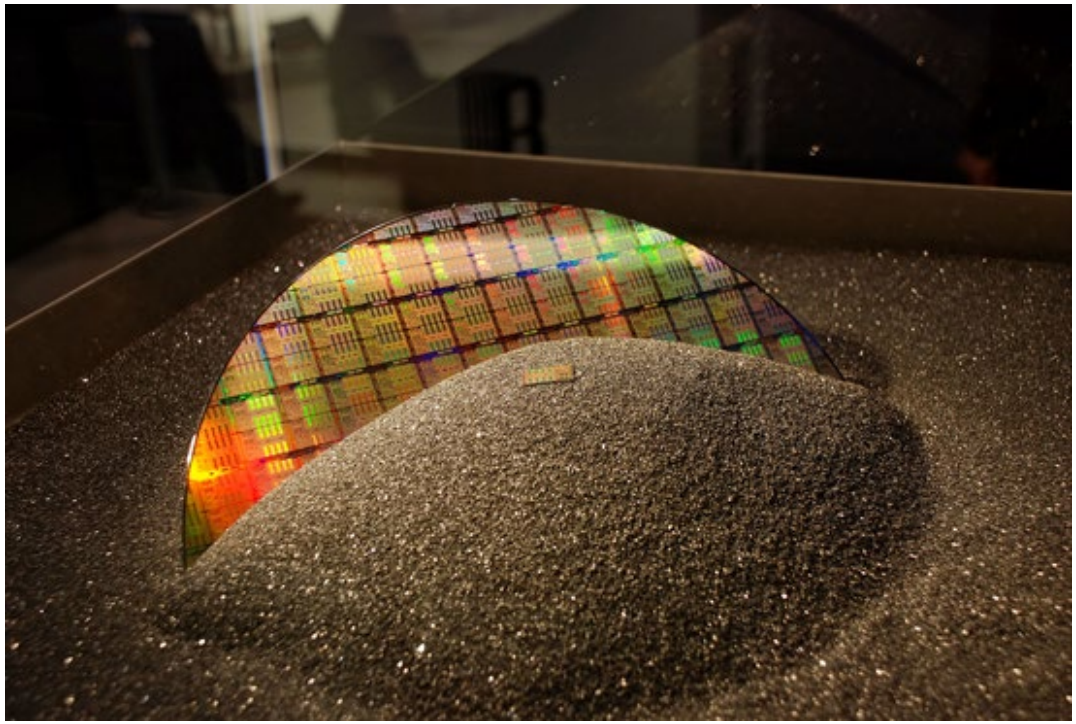
Metals are on the left and in the center of the periodic table.

Nonmetals are located mostly on the right.

Metalloids sometimes behave like metals and sometimes like nonmetals.

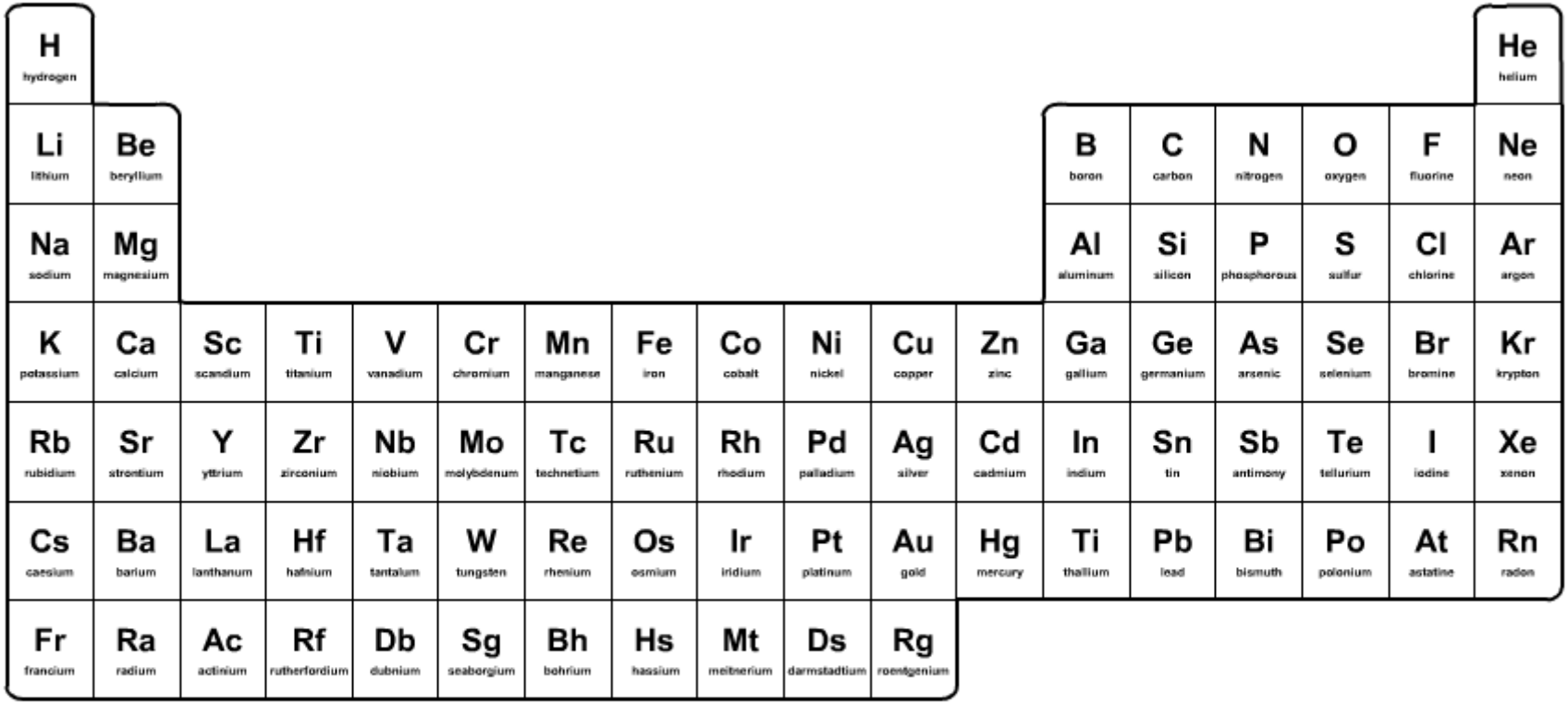
Metalloids are located between metals and nonmetals in the periodic table.

Silicon and germanium are examples of metalloids.



Metals, nonmetals and metalloids

Which elements are metals, nonmetals or metalloids?



metals | nonmetals | metalloids | show all