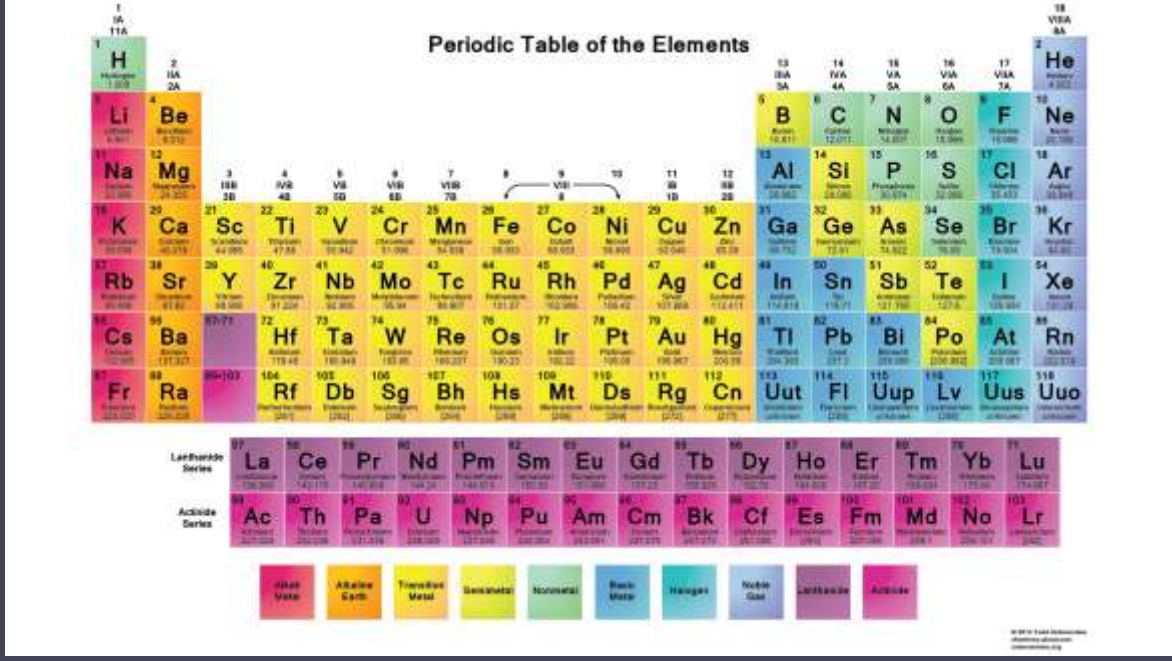


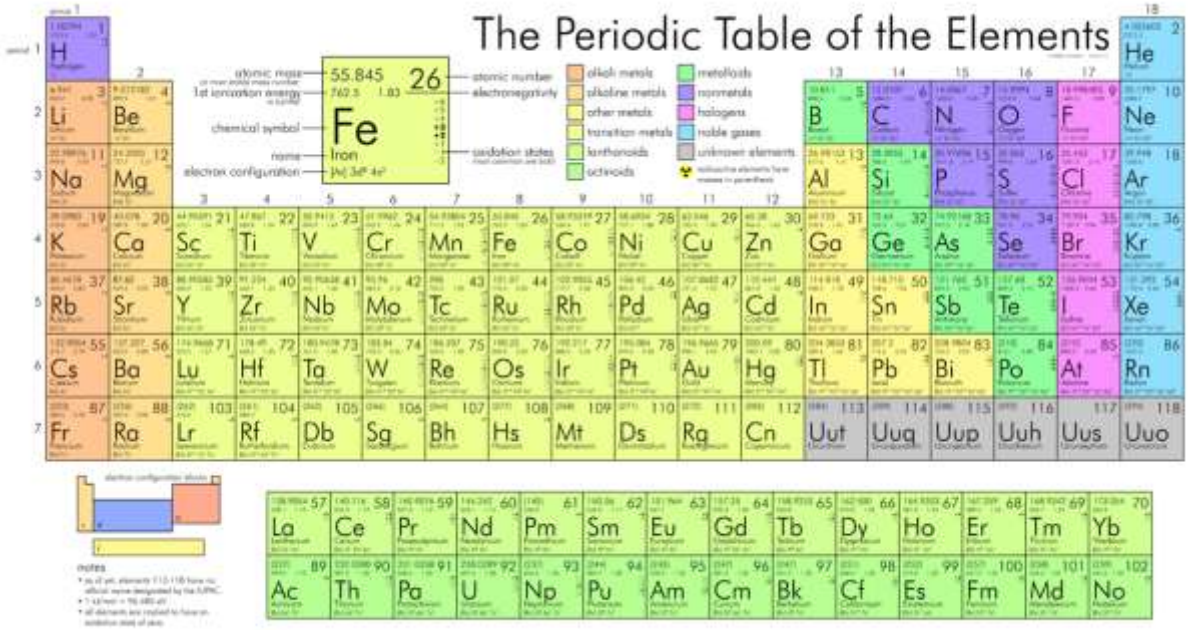
Intro to the Periodic Table

The periodic table

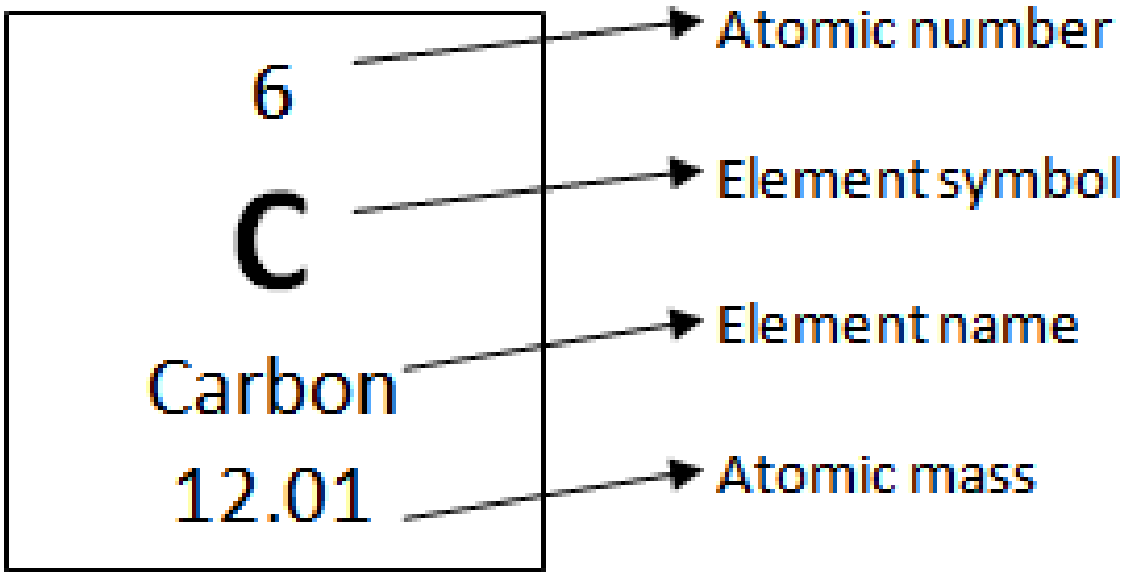
- an organized chart of all of the known elements

•Elements = substances that cannot be broken down into more simple substances

•Each element has its own unique properties



Information on the periodic table

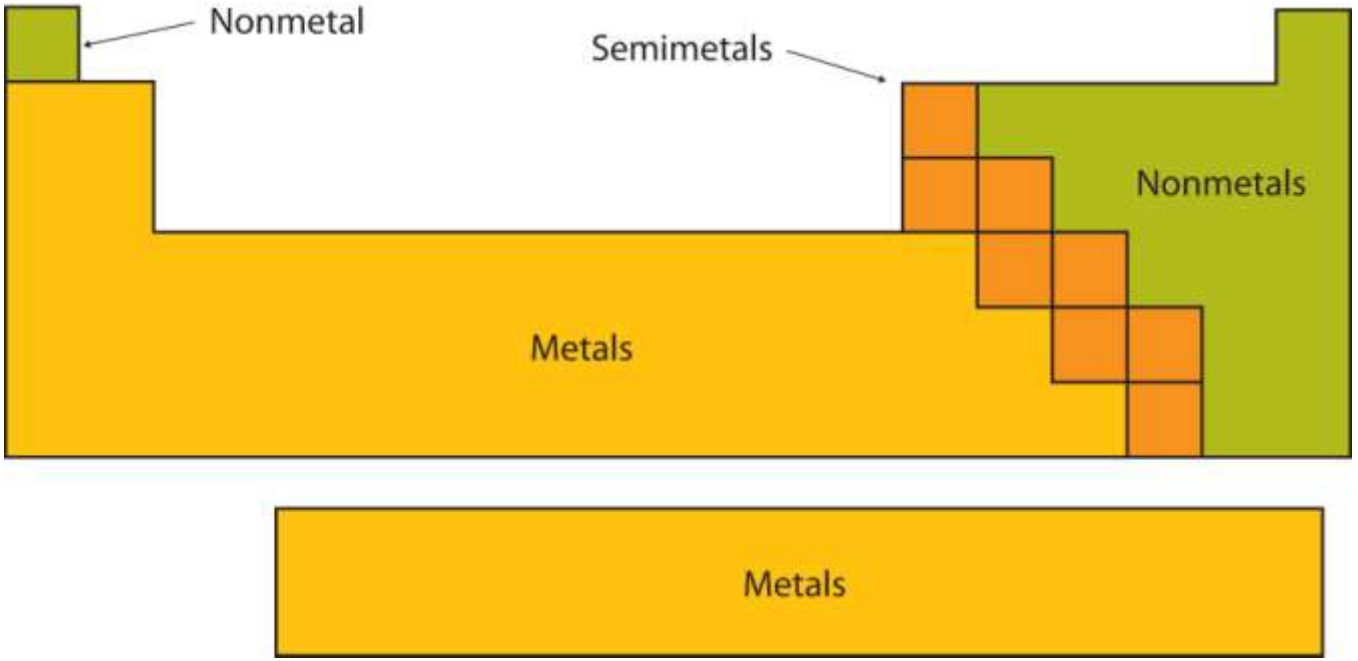


Organization of the table

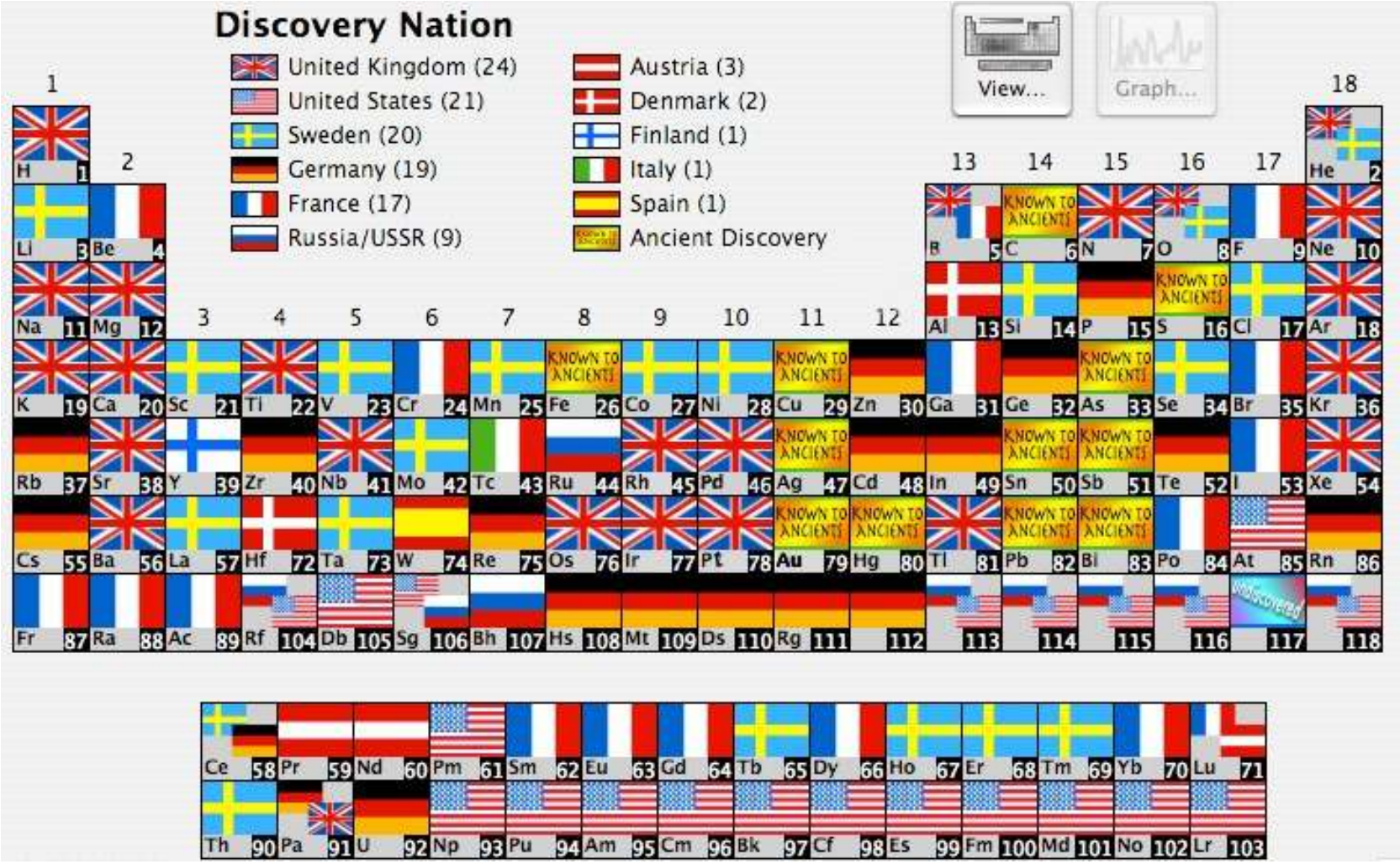
- Elements arranged by atomic number
  - atomic number = number of protons in an atom
- Elements are grouped in columns known as families.
  - Just like human families, element families share common characteristics.

Metals vs nonmetals

- Most elements on the table are metals and are found on the left. Non-metals are on the right with metalloids in-between



Where were they discovered????



Elements in Earth Science

- Of the 118 known elements, 98 are naturally occurring on Earth.
- Hydrogen and helium make up most matter in the Universe
- Iron = most abundant element inside the Earth
- Oxygen = most abundant element in the crust
- Nitrogen = most abundant element in the atmosphere