

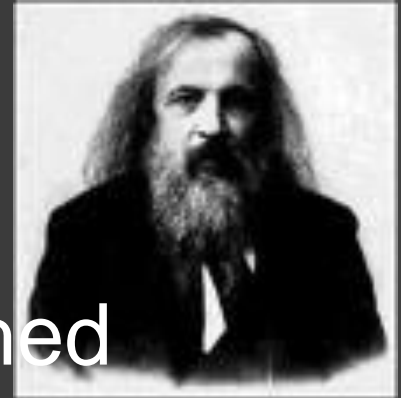
# THE PERIODIC TABLE

# What is the Periodic Table?

- The modern periodic table is a table used to organize chemical elements by atomic number

- ◎ Reimagining the Periodic Table

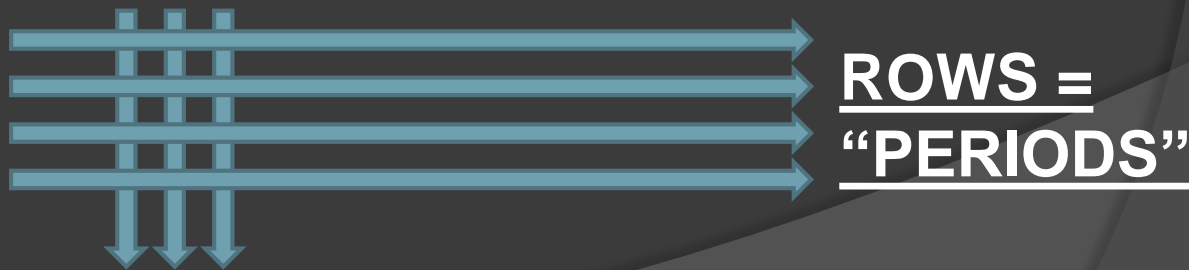
# Dmitri Mendeleev



- In 1869, Dmitri Mendeleev published the first periodic table
- He listed the elements in order of increasing atomic mass and left spaces for elements that had yet to be discovered – he was able to predict both the mass and properties for unseen elements!
- Mendeleev

# How is the periodic table organized?

- Rows going across ( $\longleftrightarrow$ ), are called periods
- Columns, going up and down ( $\updownarrow$ ) are called groups or families
- Groups/families are organized together based on shared characteristics such as reactivity.



COLUMNS = "GROUPS" OR "FAMILIES"

# Periodic Table Song

- [https://www.youtube.com/watch?v=rz4Dd1I\\_fX0&ab\\_channel=AsapSCIENCE](https://www.youtube.com/watch?v=rz4Dd1I_fX0&ab_channel=AsapSCIENCE)

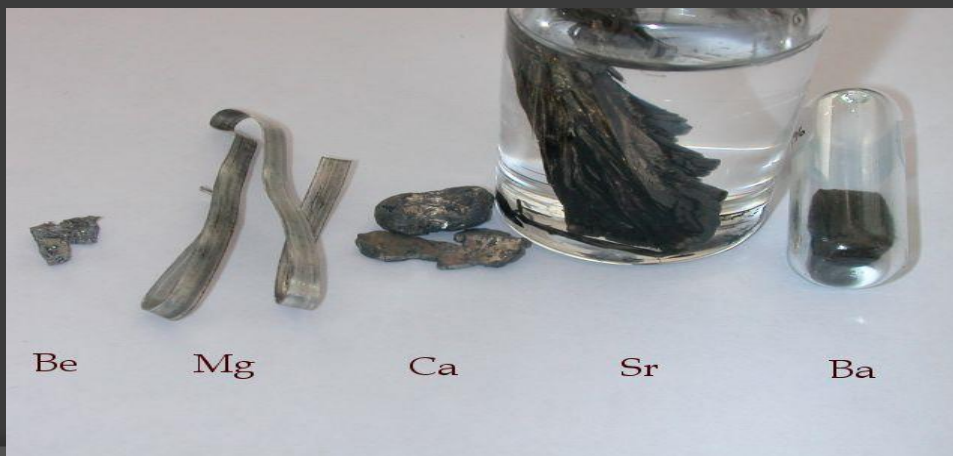
# What are the families on the periodic table?

Group	Group Name	Reactivity	Elements in this Group
1	<u>Alkali Metals</u>	<u>Very reactive metals</u>	Hydrogen, lithium, <u>sodium</u> , <u>potassium</u> , rubidium, cesium, francium

Alkali Metals

# What are the families on the periodic table?

Group	Group Name	Reactivity	Elements in this Group
2	<u>Alkaline Earth Metals</u>	<u>Somewhat reactive</u> metals	<u>Beryllium</u> , magnesium, calcium, strontium, <u>barium</u> , radium





# What are the families on the periodic table?

Group	Group Name	Reactivity	Elements in this Group
3-12	<u>Transition metals</u>	<u>Variable</u>	



# What are the families on the periodic table?

Group	Group Name	Reactivity	Elements in this Group
17	<u>Halogens</u>	Very <u>reactive</u> non-metals	<u>Fluorine, chlorine, bromine, iodine</u>



# What are the families on the periodic table?

Group	Group Name	Reactivity	Elements in this Group
18	<u>Noble Gases</u>	Very <u>non-reactive</u> gases	<u>Helium</u> , neon, argon, krypton, <u>xenon</u>

