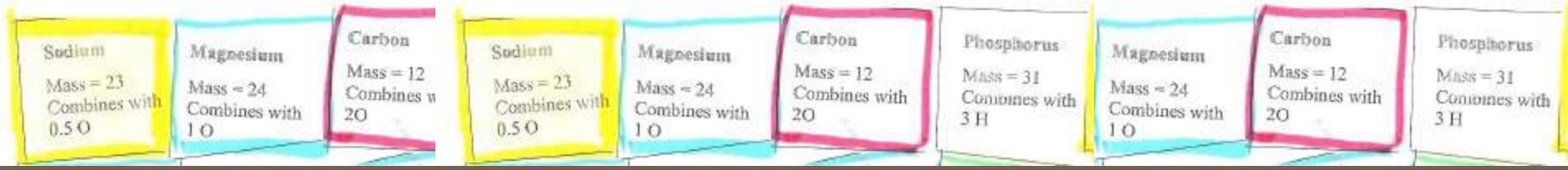
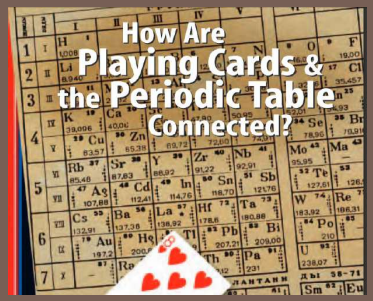




INTRODUCTION TO ATOMS,ELEMENTS, AND IONS PART 3- "DEALING" WITH THE PERIODIC TABLE

Review of what Mendeleev did.

Mendeleev was a teacher as well as a chemist. He was writing a chemistry textbook and wanted to find a way to organize the 63 known elements so it would be easier for students to learn about them. He made a set of cards of the elements, similar to a deck of playing cards. On each card, he wrote the name of a different element, its atomic mass, and other known properties. Mendeleev arranged and rearranged the cards in many different ways, looking for a pattern. He finally found it when he placed the elements in order by increasing atomic mass.

Q: What is atomic mass? Why might it be a good basis for organizing elements?

A: Atomic mass is the mass of one atom of an element. It is about equal to the mass of the protons plus the neutrons in an atom. It is a good basis for organizing elements because each element has a unique number of protons and atomic mass is an indirect way of organizing elements by number of protons.

We will do what Mendeleev did.

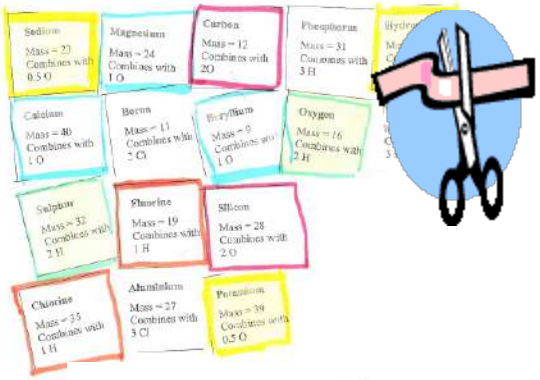
- ☐ Download the element cards in the lesson
- ☐ Cut out each element card.

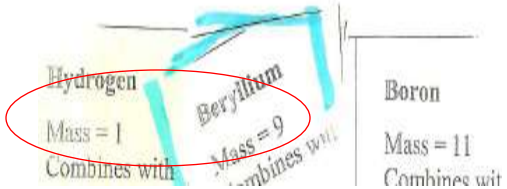
- ☐ Going left to right arrange the elements using increasing atomic mass.
(don't leave spaces for missing numbers)

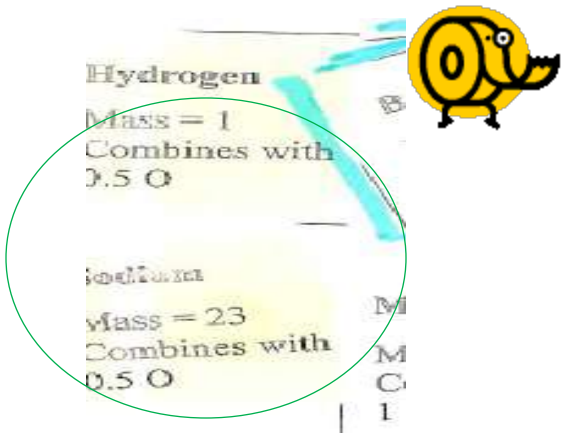
- ☐ Going top to bottom arrange in columns with similar combing powers –
the colors with help you
(don't leave spaces for missing numbers)

(You will have 7 elements across and
3 rows down)

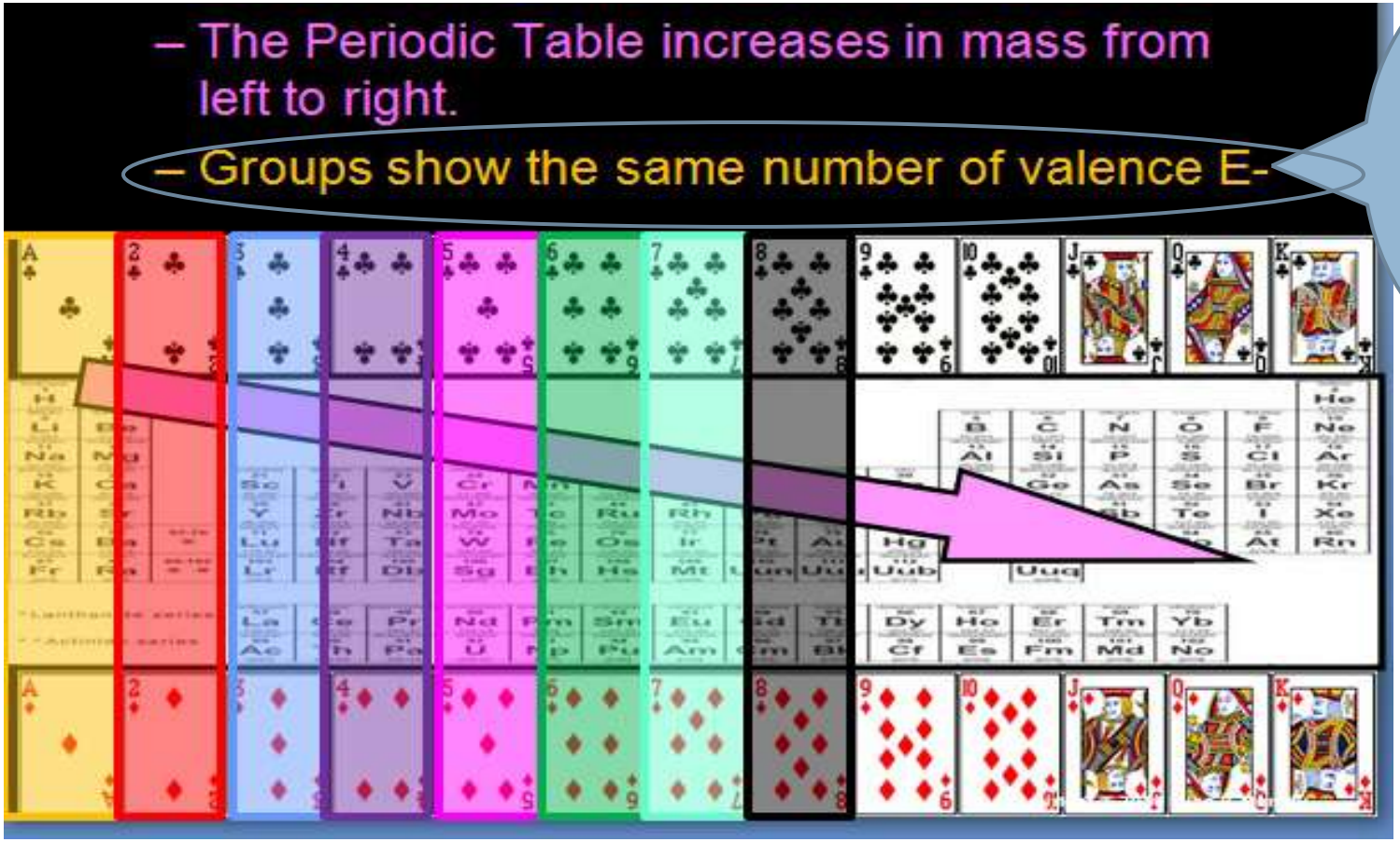
- ☐ Tape or glue down to hold in place.





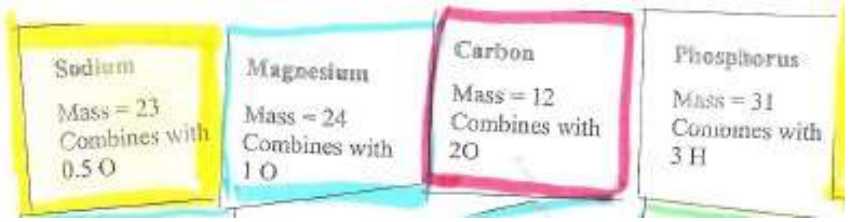


These arrangements are similar to how you arranged your playing cards



Just like Mendeleev, you found the patterns

- Take the Quiz to answer questions about this acitivity and how it relates to what Mendeleev did.
- Thanks!



- The End