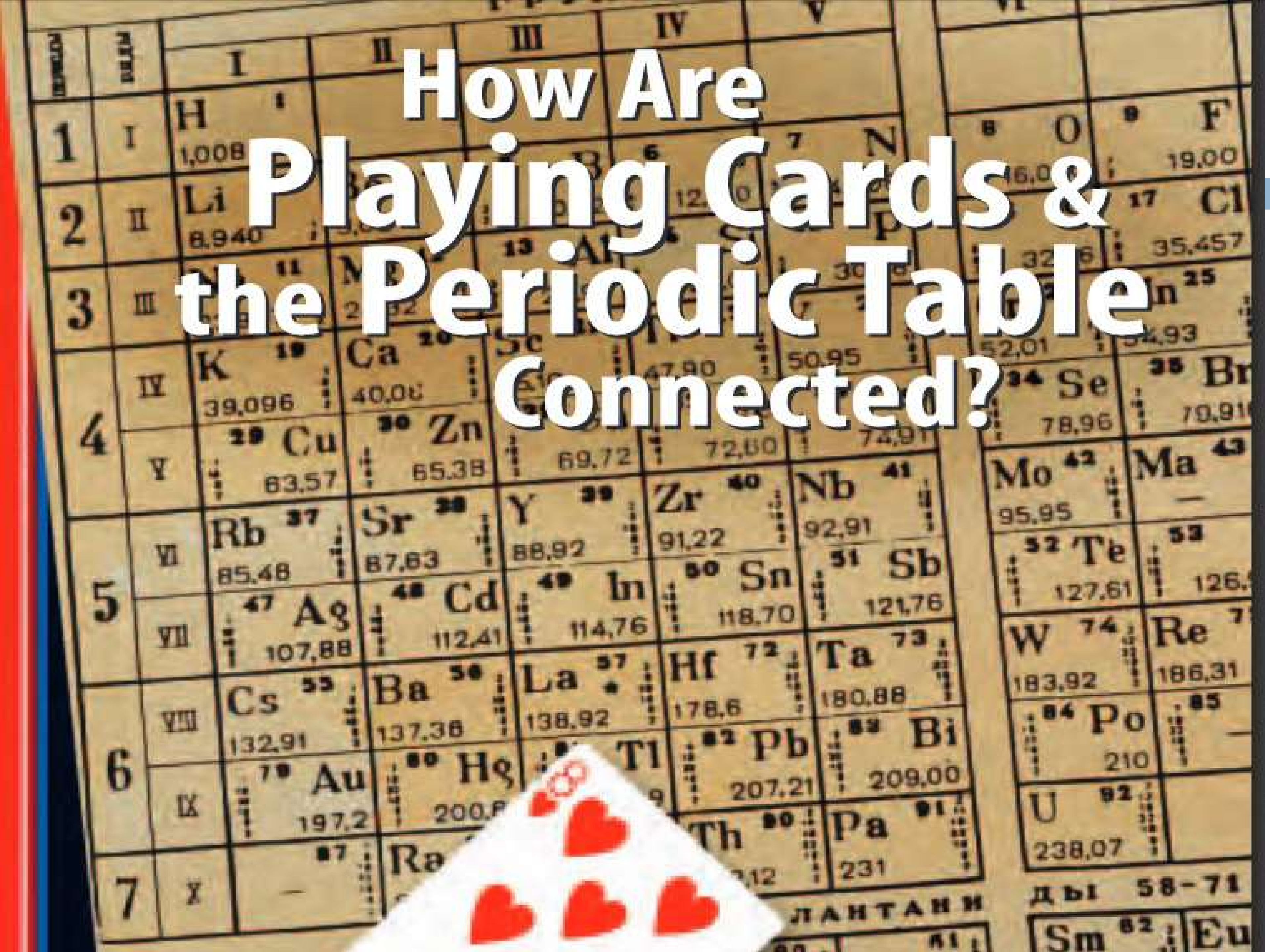
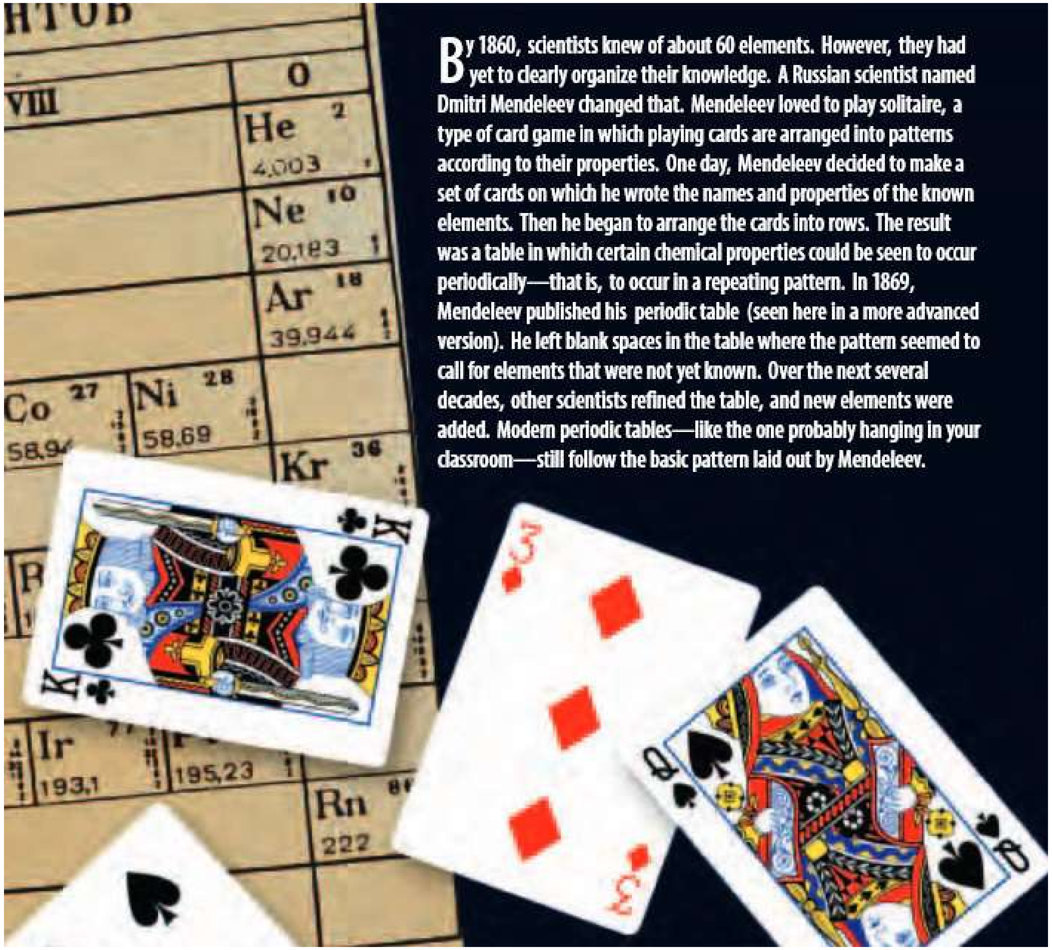
INTRODUCTION TO CHEMICAL FOUNDATIONS: ELEMENTS, ATOMS, AND IONS PART 2- “DEALING” WITH THE PERIODIC TABLE QUIZ

How Are Playing Cards & the Periodic Table Connected?

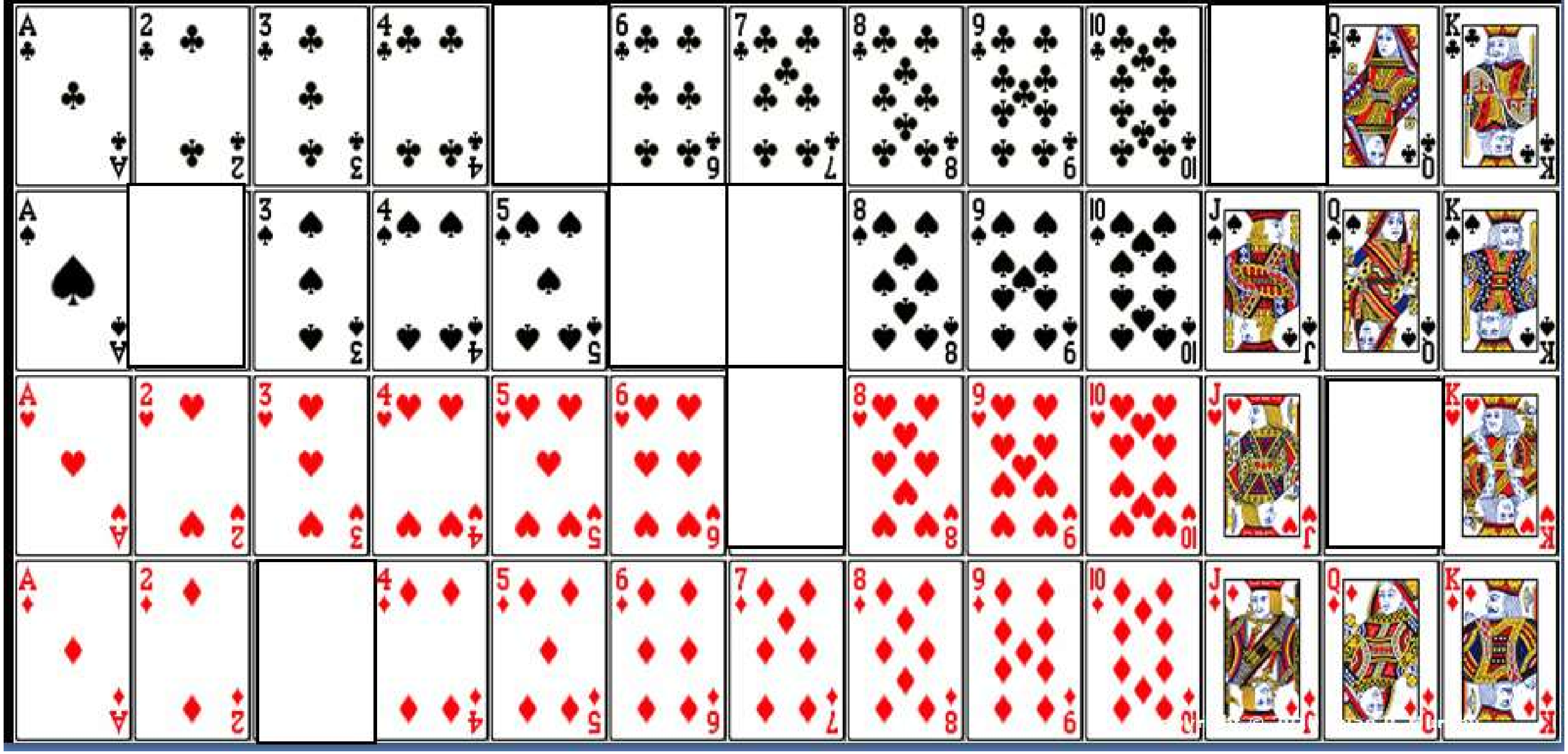


Review:

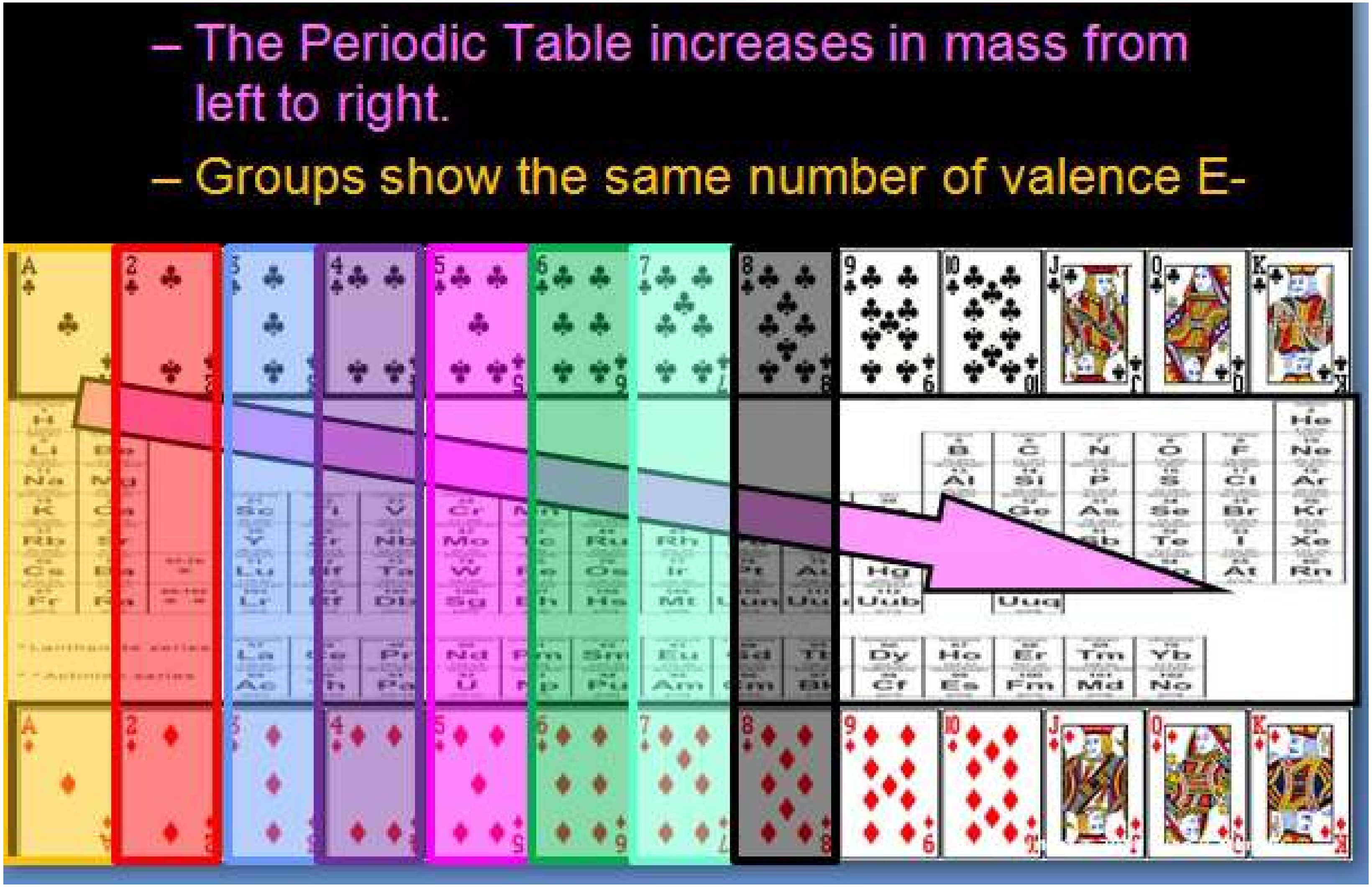


By 1860, scientists knew of about 60 elements. However, they had yet to clearly organize their knowledge. A Russian scientist named Dmitri Mendeleev changed that. Mendeleev loved to play solitaire, a type of card game in which playing cards are arranged into patterns according to their properties. One day, Mendeleev decided to make a set of cards on which he wrote the names and properties of the known elements. Then he began to arrange the cards into rows. The result was a table in which certain chemical properties could be seen to occur periodically—that is, to occur in a repeating pattern. In 1869, Mendeleev published his periodic table (seen here in a more advanced version). He left blank spaces in the table where the pattern seemed to call for elements that were not yet known. Over the next several decades, other scientists refined the table, and new elements were added. Modern periodic tables—like the one probably hanging in your classroom—still follow the basic pattern laid out by Mendeleev.

- Questions
  - Which were missing? How do you know?
  - How is the periodic table similar to the arrangements of cards?



What do the cards have in common going left to right and top to bottom?



- The Periodic Table increases in mass from left to right.
- Groups show the same number of valence E-

Take the Quiz

- You have one attempt.
- Good Luck!