



INTRODUCTION TO, ATOMS, ELEMENTS AND IONS PART 1- "DEALING" WITH THE PERIODIC TABLE.



How Are Playing Cards & the Periodic Table Connected?

Ряды	Группы	I	II	III	IV	V	VI	VII	VIII	IX	X
1	I	H 1,008									
2	II	Li 6,940									
3	III										
4	IV	K 39,096	Ca 40,08								
	V	Cu 63,57	Zn 65,38								
5	VI	Rb 85,48	Sr 87,63								
	VII	Ag 107,88	Cd 112,41								
6	VIII	Cs 132,91	Ba 137,38								
	IX	Au 197,2	Hg 200,6								
7	X										



VIII		O
		He 2 4.003
		Ne 10 20.183
		Ar 18 39.944
Co 27 58.94	Ni 28 58.69	
		Kr 36
Ir 77 193.1	Rh 78 195.23	Rn 86 222

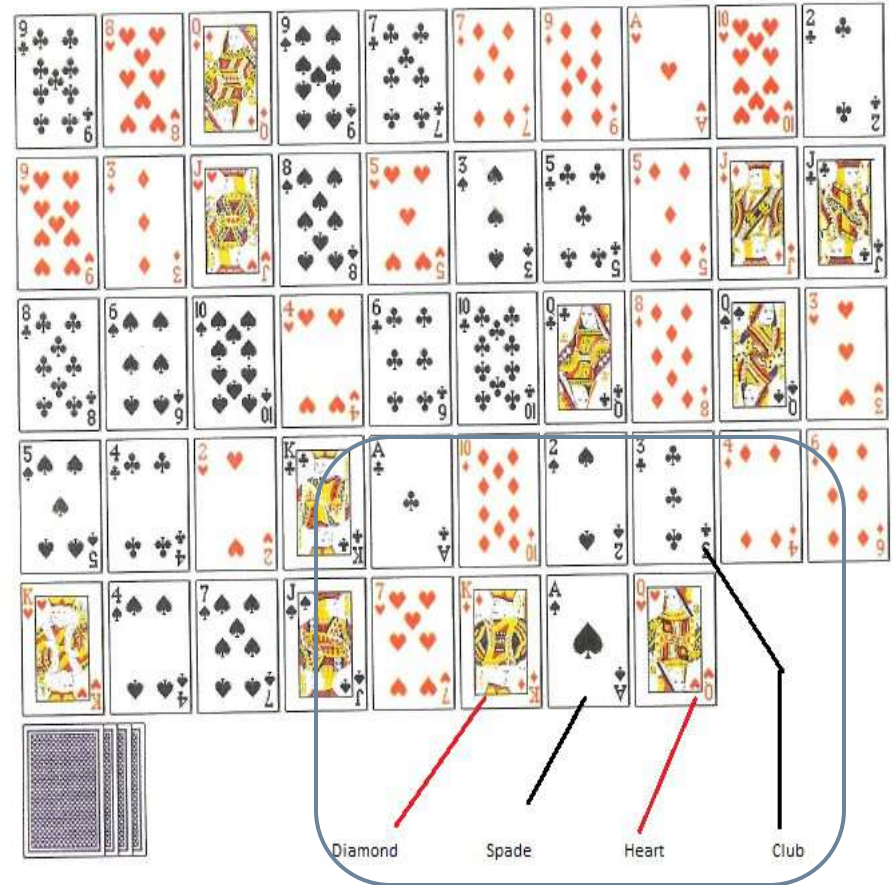
By 1860, scientists knew of about 60 elements. However, they had yet to clearly organize their knowledge. A Russian scientist named Dmitri Mendeleev changed that. Mendeleev loved to play solitaire, a type of card game in which playing cards are arranged into patterns according to their properties. One 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.



Your Job...Like Mendeleev did,

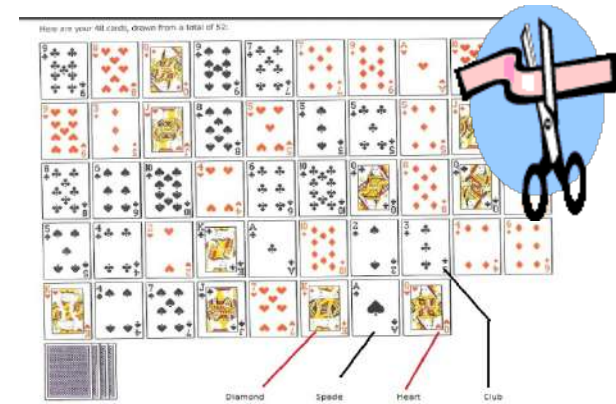
Is to arrange these
Playing cards in a
logical pattern
and find which four
Cards are missing
out of the deck.
A deck of cards has
52 cards with
four suits and 13 cards
Ace, 2, 3, 4, 5, 6, 7, 8, 9, 10,
Jack, Queen, and King

Here are your 48 cards, drawn from a total of 52:

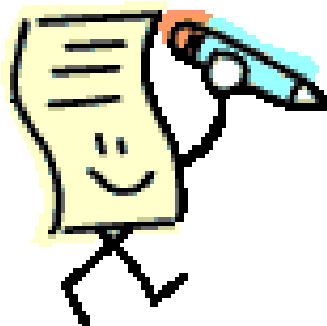


What you need to do

1. Cut out each card
2. Arrange them on a new piece of paper.
3. Tape or glue down to hold in place.
4. There will be four missing cards.
5. Write on paper which cards are missing.
6. Scan and upload your arranged cards (or take a picture of your arranged cards)



Which four cards are missing?



Number	Suit (diamond, spade, club, heart)

Just like Mendeleev you found the pattern and missing “elements”

□ Continue on to Part 2 of this assignment where you answer quiz questions about what you learned from this activity.

□ Thanks!

□ The End

