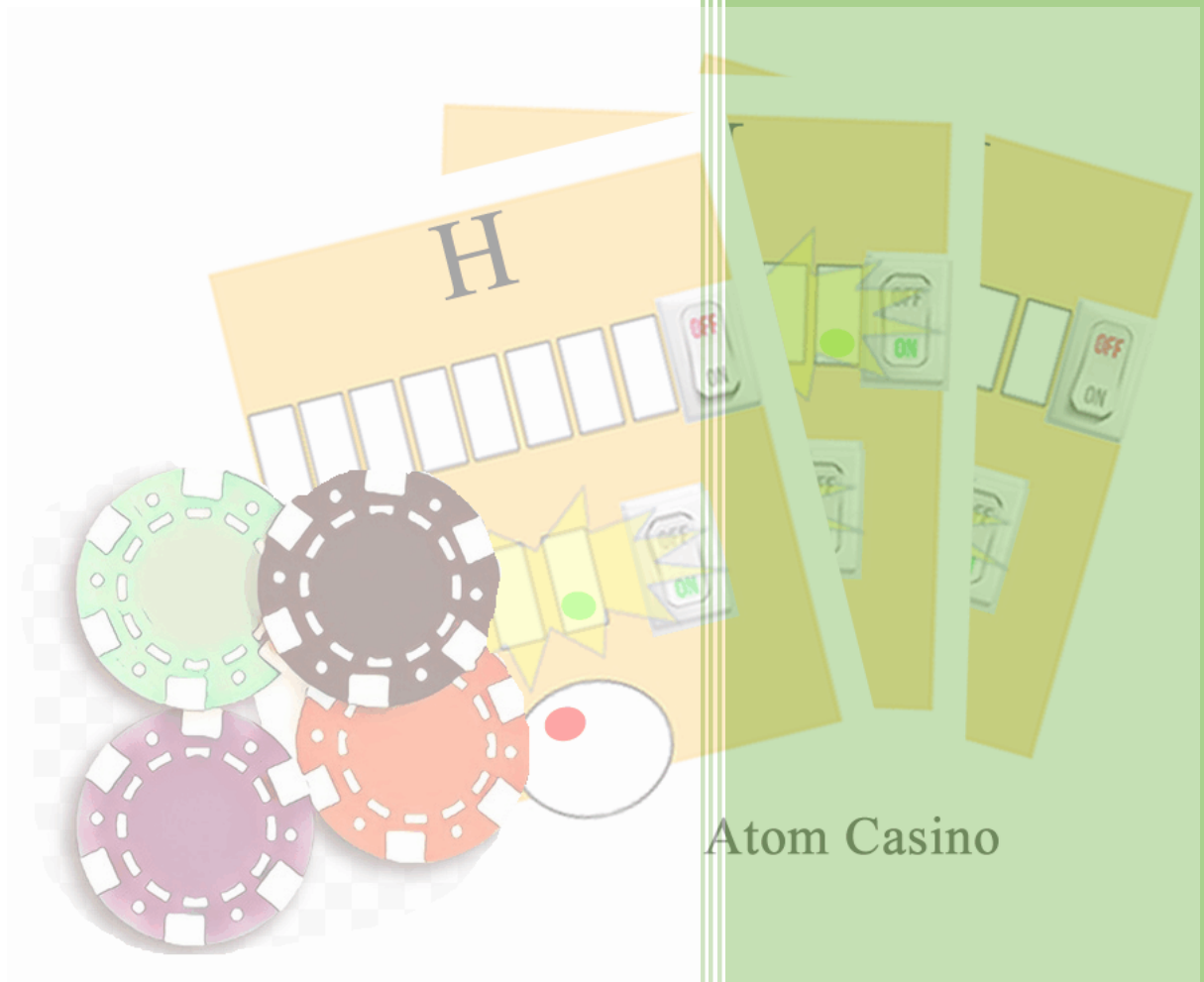


# Junior Chem

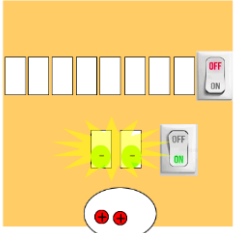
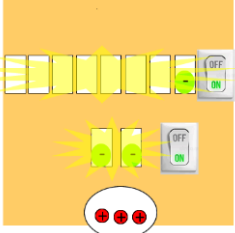
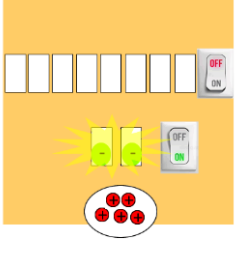
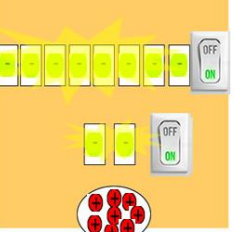

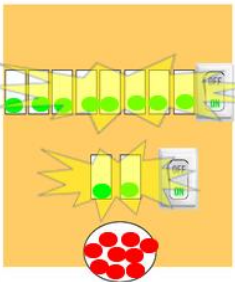
## Atoms and their electrons



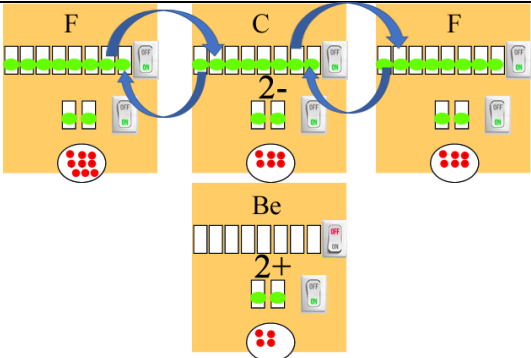
Peter Razos

Junior Chem

Complete the table below. The first one is done for you.

Element	Charge	Atomic number	Diagram
Helium	neutral		
			
			
			
Nitrogen	3-		
Fluorine	1-		

2. Using the least number of atoms of each element given, form stable groups of these atoms. Use the “Apartment Building” analogy of the atom to represent the electron structure of each atom in the group. Complete the table below; the first one is done for you.

Atoms used	Structure
Carbon, fluorine and beryllium	 <p>2 fluorine atoms share one electron each with carbon which shares one electron back with each fluorine. Beryllium donates to electrons to carbon. This causes beryllium to have a charge of 2+ and carbon to have a charge of 2-. Two fluorine, one carbon and one beryllium is the least number of atoms possible.</p> <p style="text-align: center;"><b>BeCF<sub>2</sub></b></p>
Nitrogen oxygen and hydrogen	
Boron and oxygen and fluorine	
Nitrogen and lithium	
Carbon and fluorine	

3. Complete the table below. The molecular formula of each substance is given. Your task is to group the atoms so that they are all energy efficient.

Formula	
CH <sub>4</sub>	
COF <sub>2</sub>	
C <sub>2</sub> H <sub>6</sub>	
BeNOF	
C <sub>2</sub> H <sub>4</sub> O <sub>2</sub>	

[Solutions](#)