

The background features a light gray gradient with several realistic water droplets of various sizes scattered across the surface. Some droplets are in sharp focus, while others are blurred. In the center, there are faint, concentric ripples, suggesting a stone dropped into water.

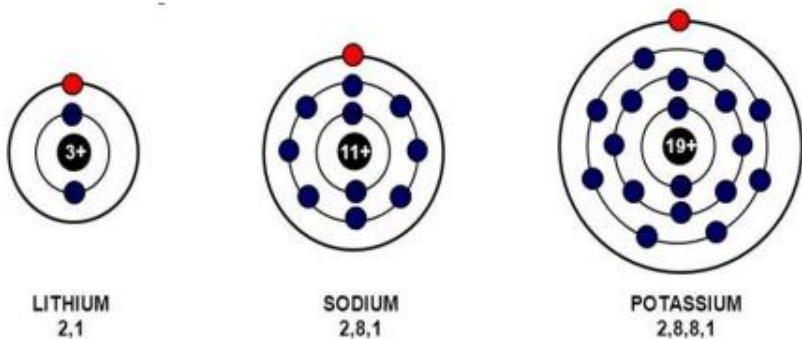
CHAPTER 8

TB&WB

WORKSHEET

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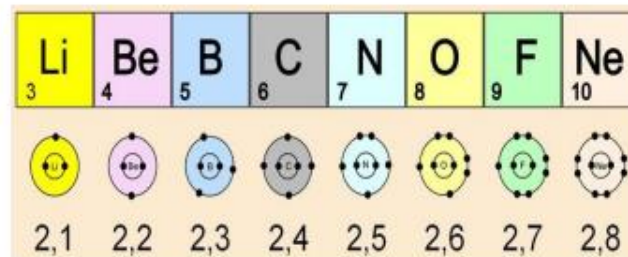
Q1: They all have 1 electron in the outer shell



Q2: They all have full outer shells

Noble Gas	Electronic Configuration
Helium He (2)	2
Neon Ne (10)	2, 8*
Argon Ar (18)	2, 8, 8*

Q3: The amount of electrons increases by 1 each time



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Q1:

Proton number: 15

Nucleon number: $15+16=31$

Q2:





















Number of protons: $19p^+$

Number of neutrons: $39-19=20n$

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Q3

Make sure to show the number of protons in the nucleus

 Hydrogen (1)	 Helium (2)	 Lithium (2.1)	 Beryllium (2.2)	 Boron (2.3)
 Carbon (2.4)	 Nitrogen (2.5)	 Oxygen (2.6)	 Fluorine (2.7)	 Neon (2.8)
 Sodium (2.8.1)	 Magnesium (2.8.2)	 Aluminium (2.8.3)	 Silicon (2.8.4)	 Phosphorus (2.8.5)
 Sulphur (2.8.6)	 Chlorine (2.8.7)	 Argon (2.8.8)	 Potassium (2.8.8.1)	 Calcium (2.8.8.2)

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Q2

		2
	3	
		2,3
		2,5
		2,7
	12	
		2,8,4
		2,8,6

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Q1

1- c

2- a

3- a

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Q3

			0
Helium		4	
Beryllium			5
Nitrogen		14	
Sodium			12
Sulfur		32	
		48	

Element	Symbol	Atomic number	Mass number	Number of electrons	Number of protons	Number of neutrons
Boron	B	5	11	5	5	6
Neon	Ne	10	20	10	10	10
Aluminium	Al	13	27	13	13	14
Sodium	Na	11	23	11	11	12
Magnesium	Mg	12	24	12	12	12
Krypton	Kr	36	84	36	36	48
Fluorine	F	9	19	9	9	10