

# Answer key

Text book& Workbook

**TB/ Page 147**

**Q1:**

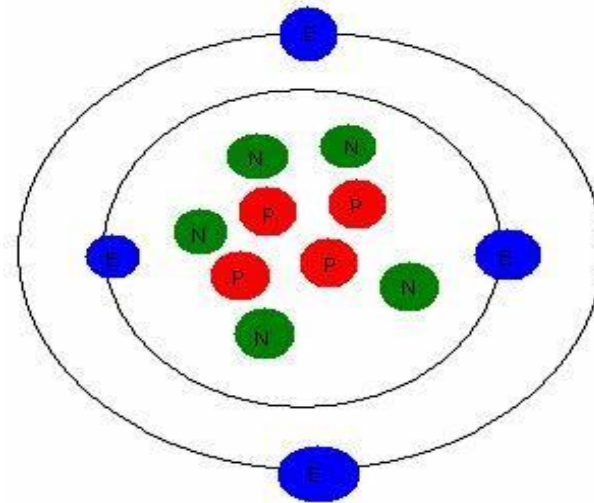
Protons/ positive

Electrons/ negative

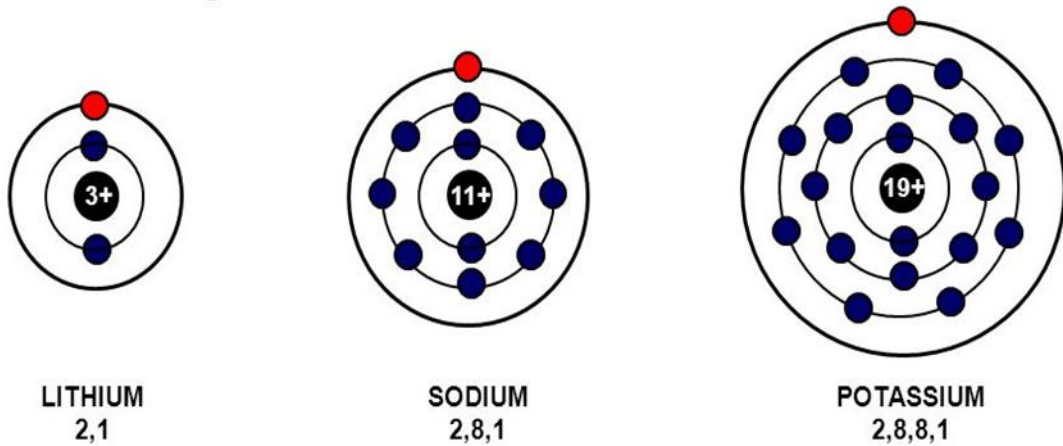
Neutrons/ neutral

**Q2:** protons and neutrons.

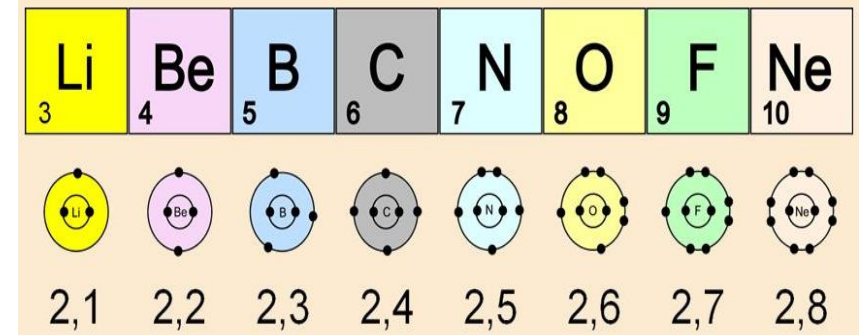
**Q3&4:** It has the same amount of +ve and -ve charges



**Q1:** They all have 1 electron in the outer shell



**Q3:** The amount of electrons increases by 1 each time



**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*

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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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### Q1:

- a) A,B,C&F
- b) D& E
- c) G

### Q2:

Nucleus, mass, positive, electrons, orbits

### Q3:





















- 1- c
- 2- b
- 3- a

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### Q2

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

Make sure to show the number of protons in the nucleus

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

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## Q1

1- c

2- a

3- a

# WB/ Page 71

## Q3

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