

Lewis Dot Diagrams

Recap:

Periodic Table :

Period number (on the

left-hand side of the

periodic table that applies to rows along

the periodic table) inform you of the

number of orbitals/energy shells those

elements have.

The Periodic Table of the Elements

Period numbers 4, 5, and 6 are highlighted on the left side of the table. Arrows point from the text 'Period number (on the left-hand side of the periodic table that applies to rows along the periodic table) inform you of the number of orbitals/energy shells those elements have.' to these highlighted rows.

Group number (on the

top that applies to

rows along the top of

The Periodic Table of the Elements


Group numbers 1 and 18 are highlighted at the top of the table. Arrows point from the text 'Group number (on the top that applies to rows along the top of' to these highlighted groups.

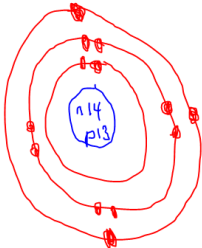

the periodic table) inform you of how many valence electrons are in the outer most shell of the atom. These electrons in the outer shell have the most energy.

These are the electrons that we need to know about for Bonding of Atoms.

Remember that in Bohr Rutherford Diagrams the 1st shell can take up to a maximum of 2 electrons; 2nd & 3rd shell can take up to a maximum of 8 electrons.

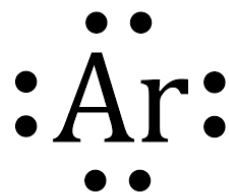
Let's practice :

Bohr-Rutherford Diagram	Group Number	Number of Valence Electrons	Lewis Dot
<p>Draw sodium :</p> <p>Na</p> <p>Na</p> <p style="color: blue; margin-left: 200px;">11p 11e 12n</p> 	1	1	<p>•</p> <p>Na</p>

Bohr-Rutherford Diagram	Group Number	Number of Valence Electrons	Lewis Dot
<p>Draw aluminum:</p> <p>Al</p>  <p style="color: blue; margin-left: 200px;">p 13 e 13 n 14</p>	13	3	
<p>Draw oxygen:</p>			

Draw phosphorus:			

Lewis Dot Diagrams



1								2
3	4	5	6	7	8	9	10	
11	12	13	14	15	16	17	18	
19	20							

