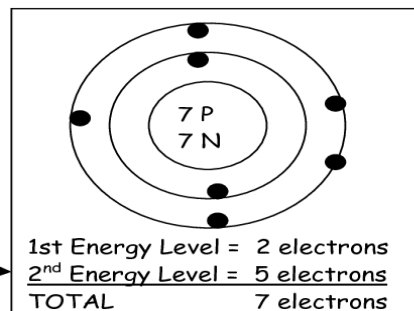
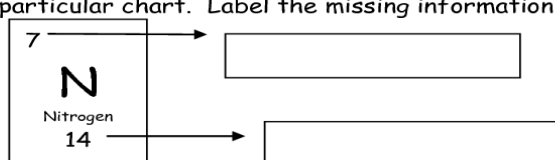


## Diagramming Energy Levels - Electron Shell Configurations

Below is a diagram of an atom of Nitrogen found on the 2<sup>nd</sup> row of the Periodic Table on the back of this worksheet. The chemical symbol for Nitrogen looks like the box below on this particular chart. Label the missing information:



**VALANCE ELECTRONS** are the number of electrons in the *OUTERMOST electron shell*, the ones available to form **BONDS**.

\*\*\* REMEMBER: The TOTAL number of electrons should match the number of protons in the nucleus so that the atom is electrically \_\_\_\_\_! \*\*\*

### DIAGRAM THE FOLLOWING ELEMENTS:

|   |   |  |  |
|---|---|--|--|
| <b>Carbon:</b><br><br><br><br><br>1 <sup>st</sup> : _____<br>2 <sup>nd</sup> : _____<br>3 <sup>rd</sup> : _____ | <b>Fluorine:</b><br><br><br><br><br>1 <sup>st</sup> : _____<br>2 <sup>nd</sup> : _____<br>3 <sup>rd</sup> : _____ | <b>Magnesium:</b><br><br><br><br><br>1 <sup>st</sup> : _____<br>2 <sup>nd</sup> : _____<br>3 <sup>rd</sup> : _____ | <b>Sodium:</b><br><br><br><br><br>1 <sup>st</sup> : _____<br>2 <sup>nd</sup> : _____<br>3 <sup>rd</sup> : _____    |
| <b>Argon:</b><br><br><br><br><br>1 <sup>st</sup> : _____<br>2 <sup>nd</sup> : _____<br>3 <sup>rd</sup> : _____  | <b>Sulfur:</b><br><br><br><br><br>1 <sup>st</sup> : _____<br>2 <sup>nd</sup> : _____<br>3 <sup>rd</sup> : _____   | <b>Oxygen:</b><br><br><br><br><br>1 <sup>st</sup> : _____<br>2 <sup>nd</sup> : _____<br>3 <sup>rd</sup> : _____    | <b>Beryllium:</b><br><br><br><br><br>1 <sup>st</sup> : _____<br>2 <sup>nd</sup> : _____<br>3 <sup>rd</sup> : _____ |