

Bohr Models

Use with textbook pages 120-122.

You can use the periodic table at the back of this workbook to help you answer these questions.

1. Complete the following table.

Atom/Ion	Atomic Number	Number of Protons	Number of Electrons	Number of Neutrons	Charge	Number of Electron Shells
hydrogen atom						
potassium atom						
fluorine atom						
fluorine ion						
lithium atom						
sulfur atom						
sulfide ion						
oxygen atom						
nitrogen atom						

2. Use the table in question 1 to draw Bohr diagrams for each of the following compounds. Determine the type and number of bonds each molecule or formula unit has. What do you notice about the valence shells of all the atoms in each compound?

Compound	Bohr Model Diagram
a) KF Name: _____ Type of bonds: _____ Number of bonds: _____	
b) Li ₂ S Name: _____ Type of bonds: _____ Number of bonds: _____	
c) H ₂ O Name: _____ Type of bonds: _____ Number of bonds: _____	
d) NH ₃ Name: _____ Type of bonds: _____ Number of bonds: _____	