



## Atomic Theories - Review Exercises

### Exercises

Use your class notes and your book to complete the following exercises.

1. Use the Periodic table to answer the following questions:

A) For the Atoms Magnesium and Fluorine **complete the following table**

Atom	# of Protons	# of Electrons	# of Neutrons	Atomic Mass	Atomic Number	Chemical Symbol
Magnesium						
Fluorine						

B) Draw the **Bohr-Rutherford diagram** for each atom

Magnesium	Fluorine

C) Complete the following table to illustrate what happens when the two atoms combine to form a molecule

Possible charge on the atom during bonding	Possible formula of the compound formed	Lewis Dot Diagram for Each Atom	Possible type of compound (ionic or covalent .. explain)
Magnesium			
Fluorine			

2. Complete the following table to explain the MAIN differences between atomic theories and their importance in the development of the Model of the Atom

<b>Scientist &amp; approximate Date</b>	<b>Name of Model or Sketch</b>	<b>Importance or Improvement on previous model</b>	<b>Shortcomings - Problems or why was it changed</b>
<b>Democritus c.300 BC</b>			
<b>Dalton c.1800</b>			
<b>J.J. Thomson c.1850</b>			
<b>Rutherford c. 1905</b>			
<b>Bohr-Rutherford c. 1920</b>			

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