

TEST 2 STUDY GUIDE

<i>Topic</i>	<i>Text Reference</i>
CHAPTER 4	
<ul style="list-style-type: none"> Know the 3 key parts of Dalton's atomic theory 	4.2
<ul style="list-style-type: none"> Describe models of atom proposed by Thomson, and Rutherford and how they were developed 	4.3
<ul style="list-style-type: none"> Know the current model of the atom and the properties of subatomic particles 	4.4
<ul style="list-style-type: none"> Determine the number of protons, neutrons, and electrons in an atom from atomic and mass numbers 	Notes
<ul style="list-style-type: none"> Know the difference between a period and a group in the periodic table 	4.6
<ul style="list-style-type: none"> Know the name of main groups in the periodic table 	4.6
<ul style="list-style-type: none"> Classify elements as metals, non-metals and metalloids 	4.6
<ul style="list-style-type: none"> Differentiate between the properties of metals, metalloids and non-metals 	4.6
<ul style="list-style-type: none"> Know how ions are formed and determine their charge based on the number of protons and electrons 	4.7
<ul style="list-style-type: none"> Know the difference between a cation and an anion 	4.7
<ul style="list-style-type: none"> Know the relationship between the charge and the location of the ions on the periodic table 	4.7
<ul style="list-style-type: none"> Know what an isotope is, and how isotopes of atoms are different 	4.8
<ul style="list-style-type: none"> Determine the number of protons, neutrons and electrons in an isotope 	4.8
<ul style="list-style-type: none"> Calculate the atomic mass of an element based on its isotope abundance and mass data 	4.9
<ul style="list-style-type: none"> Know how the abundance of an isotope is related to the average atomic mass of an atom 	Notes
CHAPTER 5	
<ul style="list-style-type: none"> Identify the general characteristics of a compound 	5.1
<ul style="list-style-type: none"> Use Law of Constant Composition to determine mass of element in a compound 	5.2
<ul style="list-style-type: none"> Identify the elements and atoms in a chemical formula 	5.3
<ul style="list-style-type: none"> Determine empirical formulas based on molecular formulas 	5.3
<ul style="list-style-type: none"> Identify elements and compounds as atomic, molecular or ionic 	5.4
<ul style="list-style-type: none"> Identify monatomic ions (Types I and II) and their charges listed on Know Your Ion list 	5.4
	Notes
<ul style="list-style-type: none"> Name and write formulas for binary ionic compounds (Types I and II) 	5.5, 5.7, Notes
<ul style="list-style-type: none"> Identify polyatomic ions and their charges listed on Know Your Ion list 	5.5, Notes
<ul style="list-style-type: none"> Name and write formulas for polyatomic compounds 	5.5, 5.7
<ul style="list-style-type: none"> Name Type II ionic compounds using the Classical method of naming for cations 	Notes
<ul style="list-style-type: none"> Name and write formulas for binary covalent (molecular) compounds 	5.8
<ul style="list-style-type: none"> Name and write formulas for acids listed in notes 	5.9
<ul style="list-style-type: none"> Calculate formula mass of compounds from atomic masses of elements 	5.11

<i>Topic</i>	<i>Text Reference</i>
<p><u>CHAPTER 6</u></p> <ul style="list-style-type: none"> • Know the mole concept and relationship of amu to grams using this concept • Calculate molar mass of compounds from atomic mass of elements • Perform calculations based on mass, mole and number of particles of substances • Identify moles of elements in a compound based on its chemical formula • Calculate mass and number of atoms of elements in a compound from its mass • Determine the mass percent composition of elements in a compound from its chemical formula or other given data • Use mass percent composition as a conversion factor to solve related problems • Distinguish between molecular and empirical formulas for a compound • Calculate empirical formula of a compound from experimental data • Calculate the empirical formula for a compound from percent composition data • Calculate the molecular formula for a compound from empirical formula and molar mass 	<p>6.3</p> <p>6.3</p> <p>6.3, 6.4</p> <p>6.5</p> <p>6.5</p> <p>6.6, 6.7</p> <p>6.6</p> <p>6.8</p> <p>6.8</p> <p>6.8</p> <p>6.9</p>