

TEST 1 STUDY GUIDE

<i>Topic</i>	<i>Text Reference</i>
<u>CHAPTER 1</u>	
<ul style="list-style-type: none"> • Know what the science of chemistry is and how it relates to us • Know the steps in scientific method • Know the SI units of measurement for mass, length, and volume • Convert from decimal notation to scientific notation and vice versa • Perform mathematical operations with scientific notation • Determine the number of significant digits in a measurement • Round numbers to a specified number of significant digit • Determine the number of significant digits in a calculated answer • Perform metric conversions involving the SI prefixes (M, k, c, m, μ) • Perform English to metric conversions with given conversion factors • Use conversion factors to solve problems involving units • Calculate density and use to determine mass and volume 	Notes P.2 1.1 1.2 1.2 1.3 1.4 1.4 1.5 1.6 1.7 1.8
<u>CHAPTER 2</u>	
<ul style="list-style-type: none"> • Know the definition and the two types of energy • Convert temperatures between F, °C, and K • Understand the conceptual difference between temperature and heat • Know what specific heat is and how it affect behavior of matter • Calculate heat based on mass, specific heat and temperature • Calculate the energy value of foods • Classify matter as element, compound or mixture • Know the definition and characteristics of elements, compounds and mixtures • Differentiate between a homogeneous and heterogeneous mixture • Differentiate between compounds and mixtures • Know the definition and characteristics of the 3 states of matter • Differentiate between physical and chemical properties of matter • Differentiate between physical and chemical changes • Know the various changes of states and the energies associated with each • Calculate the energy of the phase changes using heats of fusion and vaporization • Identify the various steps in the heating curve of a substance • Calculate the energy of multi-step heating or cooling curves 	2.1 2.2 Notes 2.3 2.3 2.4 2.5 2.5 2.5 Notes 2.6 2.6 2.6 2.7 2.7 2.7 2.7