TEST 1	STUDY	GUIDE
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Topic	Text
	Reference
CHAPTER 1	
<ul> <li>Know the steps of the scientific method</li> </ul>	1.2
<ul> <li>Identify variables in an experiment</li> </ul>	Notes
• Know the SI units of measurement for mass, length, volume, time and	1.4-1.6
density	
<ul> <li>Metric conversions involving the SI prefixes (M, k, c, m, μ)</li> </ul>	
<ul> <li>English to metric conversions with given conversion factors</li> </ul>	
<ul> <li>Convert from decimal notation to scientific notation and vice versa</li> </ul>	
<ul> <li>Perform mathematical operations with scientific notation</li> </ul>	
<ul> <li>Determine the number of significant digits in a measurement</li> </ul>	1.7
<ul> <li>Determine the number of significant digits in a calculated answer</li> </ul>	App VII
<ul> <li>Solve conversion problems using dimensional analysis</li> </ul>	Notes
CLIADTED 2	
<u>CHAFTER 2</u> Differentiate between earlen and extension (ities	Notos 22
• Differentiate between scalar and vector quantities	Notes, 2.2
• Solve simple problems involving vectors	Notes
Know definitions of position, frame of reference and motion	1 $2.1$
• Differentiate between distance and displacement; speed and velocity	2.2
• Calculate average speed from total distance and total time	2.2
Onderstand when acceleration occurs     Calculate acceleration for manual site and time data	2.3, motes
• Calculate acceleration from velocity and time data	2.3
• Determine displacement from acceleration and time data	∠.3 2.2
• Understand free fail and its characteristics	2.5
• Know direction of velocity and acceleration in an object in circular motion	2.4
• Know characteristics of simple projectile motion	2.3
CHAPTER 3	
Concept of force, net force, balanced and unbalanced forces	3.1
• Know Newton's 1 <sup>st</sup> law and its relation to motion	3.2
<ul> <li>Know Newton's 2<sup>nd</sup> law and its relation to acceleration</li> </ul>	3.3
Calculate net force from acceleration & mass	3.3
• Differentiate between mass & weight	3.3
• Know Newton's 3 <sup>rd</sup> law and action-reaction force pairs	3.4
Know what force of gravitation between two objects depends on	3.5
• Understand how the force of gravitation between two objects changes as	3.5
mass and distance between them change	
• Calculate linear momentum of an object from mass and velocity	3.6
• Solve problems based on conservation of momentum principle	3.6
• Know what angular momentum is and what it is affected by	3.6
• Apply law of conservation of angular momentum to analyze circular	3.6
motion	

