



**MONROVIA UNIFIED SCHOOL DISTRICT
2009-2010 INSTRUCTIONAL PACING GUIDE**

"World Class Schools for World Class Students"

Physics

- *E.S. – monthly (Tungston)
- *M.S. Math & English – 6 wks (Tungston)
- *M.S. Sci. & Soc.Sci. – 6 wk (benchmark @ 9 wk)
- *H.S. All Content – 9 wk (benchmark @ 9 wk)

Department	Science
Course Name	Regular Physics
Grade Level	9-12
Instructional Reference Material(s)	<ol style="list-style-type: none"> 1. Glencoe Science: Physics Principles and Problems (California Edition), McGraw Hill ©2008. 2. Modeling Instruction in Physics Curriculum, Arizona State University. 3. CASTLE (Capacitor-Aided System for Teaching and Learning Electricity), Modeling version.

Grading/ Benchmark Term	Standard	Topic & Resource Reference	Major Activities (tests, projects, tests, reports, performances)	Common Vocabulary (Content & Academic)	Differentiation Intervention (Skills level, SADIE)	Other Information
Quarter #1 (9 wks)	1a	Unit 1: Graphing and Data Analysis [1week] <i>Glencoe Science:</i> <ul style="list-style-type: none"> • Chapter 1: Physics Tool Kit Unit 2: Constant Velocity Motion [3 weeks] <i>Modeling Instruction:</i> <ul style="list-style-type: none"> • Unit 2: Constant velocity Model <i>Glencoe Science:</i> <ul style="list-style-type: none"> • Chapter 2: Representing Motion 	<ol style="list-style-type: none"> 1. Lab: M&M 2. Lab: Spaghetti Bridge 	Independent variable, dependent variable, slope, y-intercept, mathematical modeling		
	1b,d	Unit 3: Uniform Acceleration [2 weeks] <i>Modeling Instruction:</i> <ul style="list-style-type: none"> • Unit 3: Uniform acceleration Model <i>Glencoe Science:</i> <ul style="list-style-type: none"> • Chapter 2: Accelerated Motion Unit 4: Newton's 3rd and 1st Laws [3 weeks] <i>Modeling Instruction:</i> <ul style="list-style-type: none"> • Unit 4: Free particle model, Inertia <i>Glencoe Science:</i> <ul style="list-style-type: none"> • Chapter 4: Forces in One Dimension 	<ol style="list-style-type: none"> 1. Lab: Inclined rail 2. Lab: Video analysis of uniform acceleration. 	Instantaneous velocity, acceleration		
			<ol style="list-style-type: none"> 1. Newton's 3rd Law Activities 2. Comparing mass and weight 3. Friction Lab 4. Newton's 1st Law activities(inertia) 	Force, tension, friction, buoyancy, gravitational field strength, normal force, gravitational force, mass, weight		

