

**Bahe's Physics 8: Unit 1 Class Schedule & Assignments: Motion I**  
**Week 4: Sept. 11 - 18, 2017**

<b>Physics 8: Class Schedule &amp; Assignments: Unit 1: Motion Part 1</b>			
Week 1, Aug 24	Day 3 Thurs	Intro to course; Receive Binder; Science Policies; See Bahe's Physics 8 Webpage <a href="http://science.jburroughs.org/mbahe/Physics8/Physics8HomePage.html">http://science.jburroughs.org/mbahe/Physics8/Physics8HomePage.html</a> Lab: Coordinates for the clock location & unknown object's location Do 4.1 Position on the Coordinate Plane (Binder 9-11)	This space would have been HW due for Thursday (today) but we didn't have class yet! It was still summer.
	Day 4 Fri	Introduce/Review Metric System (Binder 15 & 17) Lab: Metric Measurements - Length Lab: Metric Measurements – Mass & Time (Use Measuring Length Binder 121) Practice Converting between metric units	Finish problems on 4.1 Position on the Coordinate Plane (Binder 9-11) (Started in class) Review Textbook pg. 4-6, and 9 -11 and 14; Read and sign the safety contract (Binder 3); Read Course Expectations & Science Policies (Binder 5-6); Look at objectives (Binder 7) Put Dividers into binder Unit 1 (p. 1-90); Unit 2 (p. 91-134); Unit 3 (p. 135 - 182); Unit 4 (p. 183 - 228); Unit 5 (p. 229 - 270) and R.G. Project (pg. 271 - 278)
Week 2 Aug 28	Day 1 Mon	Introduce Position, Distance & Displacement (ppt) Lab: Washer Motion Activity (Binder 27-29)	Do Position on Coordinate Plane Extra Practice (Binder 13-14) Read 1.1 SI Units (Binder pg. 23-25) and Do Practice (Binder pg. 26)
	Day 2 Tues	Review HW; Lab: Toy Motion – 1) observe motion of variety toys (10 min Binder 39-40); 2) collect motion over time Discuss or do: 1) How to make a data table and how to graph; 2) Independent & dependent variables; 3) Construct a position-time graph of toy motion (Binder 40-41); If Time/needed: Discuss Dimensional Analysis (Binder 31-33)	Read Text p. 78 and 83 Complete the Washer Activity, Binder 27-29 (mostly done in class). Do 1.3 SI Unit Conversion – Extra Practice (Binder 35-37)
	Day 3 Thurs	Lab: Constant Speed 1; 1) Graph data- Binder 49-50 (two lines, walking fast and walking slow) (Ignore motion map until later); Explain how to graph the data.	Finish your data table and graph of the toy motion (Binder 41); Do Identifying Constants & Experimental Variables (binder 43-44) and 1.1 Stopwatch Math (Binder 45-47)
	Day 4 Fri	QUIZ: Metric Conversions; Position, Distance, and Displacement (Very Short) Discuss Lab Constant Speed 1 results Binder 49-50 (two lines) (Ignore motion map until later); Discuss and do Lab Constant Speed 2 two sets – walking fast and walking slow (Binder 55-56);	Complete Constant Speed 1 (Binder 49-50 – Ignore Motion Map for now) AND do Scatter Plots (Binder 51-53). REVIEW FOR QUIZ (Redoing practice problems is good way to study)
Week 3 Sept. 4	Day 1 Mon	LABOR DAY!!!	No School; No Assignment
	Day 2 Tues	Complete Data for Constant Speed 2 (Binder 55-56) if needed Introduce Motion Maps How to make a motion map Try making and reading motion maps (Use Binder pg. 59 and 60 in class);	Read Motion Maps (Binder pg. 57-58 not 59 – Just read; we will do problems in class) Watch youtube video: Falconphysics Democast – Making Sense of Motion Maps (11 minutes): <a href="http://www.youtube.com/watch?v=uF7XyddBgQ4">http://www.youtube.com/watch?v=uF7XyddBgQ4</a> Do 2.3 Interpreting Graphs (Binder 61-62)
	Day 3 Thurs	Whiteboard Motion Maps (Binder pg. 59-60) Lab: Constant Speed 3 & 4 (away from and toward origin on the negative side – Binder pg. 63-64)	Complete Lab Constant Speed 2 (Binder 55-56 – Include the motion map).
	Day 4 Fri	Compare 4 sets of Graphs (Const. Speed 1, 2, 3 & 4); Develop concept of slope and discuss Slope, Rate and Velocity; Do mathematical Expressions (Use Binder 67-70 - some) Use Binder pg. 71-72 (Calculating Slope from a Graph) in class	Complete Constant Speed 3 (Binder 63-64) – Make sure to add the motion maps at the top right. Do What's the Scale (Binder 65-66)

**Look at the Back Side!**

Week 4 Sept. 11	Day 1 Mon	<p>QUIZ: Motion Map &amp; Graphing Practice Mathematical Expressions (67-70 &amp; 79-81) Try some Motion Map problems (Binder 60C – 60F) Preview of the Lab Quiz - Tomorrow</p>	<p>Finish Calculating Slope (Binder 71-72) Finish 4.1 Speed (Binder 67-70 – ALL Problems not done in class)</p>
	Day 2 Tues	<p>Lab QUIZ: Speed of the Bubble Experiment (Pairs design &amp; complete independently) (Binder pg. 77-78)</p>	<p>Read Text pg. 48, 79-82 and 84-85, 87-90 Do 4.1 Velocity (Binder pg. 79-81 #1-12) (Mostly finished in class) <b>Get started on tomorrow night's assignment – reviewing for test</b></p>
	Day 3 Thurs	<p>Review Day Lab Activity: Graph Matching (Binder 83-84 and 87-89) Use motion detectors, computers, and LoggerPro to match your motion to a graph. Could use some problems from Review: Velocity chart (Binder 85-86)</p>	<p>Complete the Bubble Tube Quiz (Binder pg. 77-78) As review, do the following review problems: <ul style="list-style-type: none"> <li>Text pg. 86 #1, 2, 3, 6, 8</li> <li>Text pg. 90 #1, 3, 4, 5, 6, 7, 8 &amp; 9 (Note 8 &amp; 9 are challenging)</li> <li>Text pg. 102-106 Concepts #3, 4, 5, 7, 8, 9, 10 Problems: 2, 3, 8, 11, 12, 13, 17 Applying: #4</li> </ul> <p>Answers will be posted after class. <b>Bring your Textbook to class today</b></p> </p>
	Day 4 Fri	<p><b>TEST #1: Motion (Chapter 4); Notebook Check</b> Chapter 1: Sections 1.1, 1.2 and pg. 13 Chapter 2: Pg. 30-31, Section 2.3 Chapter 3: pg. 64 Chapter 4: Sections 4.1 and 4.2</p>	<p>Prepare for your first test. <ul style="list-style-type: none"> <li>Use the unit objectives (Binder pg 7) as well as all class notes, homework, labs, and text readings and review assignments.</li> <li>Ask one another questions.</li> <li>Bring your binder to class for a notebook check.</li> </ul> <p><b>Bring your calculator and 3" x 5" notecard to class for your test.</b></p> </p>
Week 5 Sept. 18	Day 1 Mon	<p>NEW UNIT: New Partners; Go Over Test Lab: Speed Up 1 (Position v Time - Binder Pg. 93 - 95) If time, introduce using Logger Pro to make graphs</p>	<p>Read Text Page 92</p>