

# CLASS NAME--B PERIOD 2017-2018

First Quarter, 2017-2018						
SUN	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SAT
#	8/28	8/29	8/30	8/31	9/1	#
	<p>Note 1: The links on this calendar are active. That is, if you want to go to where they are pointing, just click on them. Unfortunately, if the URL is longer than a line in a pdf, which is what this is, this won't work . . . so I've had to make the URLs tiny to fit on a single line. Inconvenient? Yes, but they work. Try one and you'll see.</p>	<p>Note 2: This year is going to be fun. Say that over and over again five times while standing on your right foot, otherwise the incantation won't work . . . and believe me, if you aren't having fun later in the year, it will be <i>your fault</i> for not having done this now and not having done it right.</p>	<p><u>First Day of School (not a rotation day)</u> <b>CLASS:</b> 1.) introduction to the class 2.)</p>	<p><b>CLASS: (day 1 schedule)</b> <b>TEST 1</b> (Chapter 2--1-d kinematics)</p>	<p><b>CLASS: (day 2 schedule)</b> 1.) scalars and vectors; 2.) briefly talk about <i>graphical vector addition</i> and subtraction; 3.) <i>polar notation</i>; 4.) <i>unit vector notation</i>; 5.) converting from one to the other 6.) Book Sections: 2.1, 2.2, 2.3</p>	
			<p><b>HMWK:</b></p>	<p><b>HMWK:</b> 1.) relax</p>	<p><b>HMWK:</b> 1.) do Probs 3.1, 3.3, 3.7 and 3.15; 2.) download Lab--<i>Cart Lab (L-1)</i>; <b>OPTIONAL:</b> 3.) if confused about graphical vector addition and subtraction, watch zPoly: 4a (graphical vector manip.) <a href="http://www.youtube.com/watch?v=rrzj-dz1dODQ">www.youtube.com/watch?v=rrzj-dz1dODQ</a> 4.) if confused about polar notation, watch zPoly: 5a (polar notation presented) <a href="http://www.youtube.com/watch?v=Ni2yg9TzFQ">www.youtube.com/watch?v=Ni2yg9TzFQ</a> 5.) if confused about unit vector notation, watch zPoly: 5b (unit vector notation presented) <a href="http://www.youtube.com/watch?v=HOqkMqj6nMQ">www.youtube.com/watch?v=HOqkMqj6nMQ</a></p>	
#	9/4	9/5	9/6	9/7	9/8	#
	<b>LABOR DAY HOLIDAY</b>	<p>L-day 6 <b>CLASS doesn't meet this first L-period:</b></p>	<p><b>CLASS: (day 1 of rotation)</b> 1.) do <i>Cart Lab (L-1)</i> (acceleration of cart)</p>	<p><b>CLASS:</b> 1.) do Reflection Activity; 2.) talk briefly about formalized presentation of position, velocity and acceleration vectors (covered in first few sections of Ch 4); 3.) introduce 2-d projectile motion with cannon problem; 4.) Book Sections: 4.1, 4.2 and 4.3</p>	<p><b>CLASS:</b> 1.) in-class Quiz--Speed 2.) <i>centripetal acceleration</i> and uniform circular motion (show old school video); 3.) <i>radial</i> and <i>tangential unit vectors</i>; 4.) relative velocity and acceleration--graphical analysis; 5.) Book Sections: 4.4, 4.5 and 4.6</p>	
		<p><b>HMWK:</b> 1.) do Probs 3.19, 3.23, 3.41; 2.) complete lab write-up if not finished in class (this will be due on Friday)</p>	<p><b>HMWK:</b> 1.) do Probs 4.1, 4.3, 4.5, 4.7 and 4.9</p>	<p><b>HMWK:</b> 1.) do Probs 4.11, 4.15, 4.17, 4.19, 4.21 and 4.23;</p>		
#	9/11	9/12	9/13	9/14	9/15	#

	<p><b>CLASS:</b></p> <p>1.) continue with topics from previous day; 2.) possibly show motoGP video; 3.) possibly do <i>2-d Air Table Lab</i>--determine radial and tangential acceleration of point on the curve . . . 4.) set up monkey in tree; 5.) Book Sections: 4.4, 4.5 and 4.6</p>	<p><b>CLASS:</b></p> <p>1.) monkey in tree; 2.) do <i>To Catch a Ball Lab (L-3)</i> (run and shoot lab); 3.) possible guest lecturer</p>	<p><b>Day 6</b></p>	<p><b>CLASS:</b></p> <p><b>Test 2</b> (Ch's 3 and 4 -- vectors and 2-d kinematics)</p>	<p><b>CLASS:</b></p> <p>0.) go over test; 1.) <i>island series LAB-- (protractor and incline)</i>; 2.) intro to Newton; 3.) mass--gravitational and inertial; 4.) N.F.L. and N.S.L.; 5.) Book Sections: 5.1, 5.2, 5.3 and 5.4</p>
	<p><b>HMWK:</b></p> <p>1.) do Probs 4.27, 4.30, 4.31 and 4.32; 2.) <i>download LAB--To Catch a Ball Lab (L-3)</i></p>	<p><b>HMWK:</b></p> <p>1.) do Probs 4.36, 4.37, 4.40 and 4.42; 2.) <i>download Practice Test</i> 3.) <b>CHIPOTLE NIGHT from 5:30 to 7:00 PM</b></p>		<p><b>HMWK:</b></p> <p>1.) take a break</p>	<p><b>HMWK:</b></p> <p>1.) do Probs 5.1, 5.3, 5.5, 5.7 and 5.13;</p>
#	9/18	9/19	9/20	9/21	9/22 #
	<p><b>L-day 3</b></p> <p><b>CLASS:</b></p> <p>1.) <i>gravitational force</i>; 2.) <i>N.T.L.</i>; 3.) <i>N.S.L.</i> problem; 4.) Book Sections: 5.5, 5.6 and 5.7</p>	<p><b>CLASS:</b></p> <p>1.) N.S.L. problems; 2.) Book Section: 5.7</p>	<p><b>CLASS:</b></p> <p>1.) do <i>NSL (Double Atwood Machine) Lab (L-6)</i>;</p>	<p><b>Day 6</b></p>	<p><b>CLASS:</b></p> <p>1.) N.S.L. problems; 2.) Book Section: 5.7</p>
	<p><b>HMWK:</b></p> <p>1.) do Probs 5.20, 5.21, 5.24 and 5.28; <b>OPTIONAL:</b> 2.) if you'd like to see a Newton's Second Law formally approached, look at <i>zPoly: 8 (N.S.L.'s formal approach on elevator problem)</i> at <a href="http://www.youtube.com/watch?v=rWX8poiG6D8">www.youtube.com/watch?v=rWX8poiG6D8</a></p>	<p><b>HMWK:</b></p> <p>1.) do Probs 5.31, 5.33 and 5.35; 2.) <i>download LAB-- N.S.L.(Incline) Lab (L-)</i></p>	<p><b>HMWK:</b></p> <p>1.) write up <i>N.S.L.(Double Atwood Machine) Lab (L-6)</i></p>		<p><b>HMWK:</b></p> <p>1.) chill out; <b>OPTIONAL:</b> 2.) if you'd like to see a N.S.L. problem with two accelerations, look at <i>zPoly: 11 (N.S.L.'s problem with 2 accelerations)</i> at <a href="http://www.youtube.com/watch?v=rojdx8zukPg">www.youtube.com/watch?v=rojdx8zukPg</a></p>
#	9/25	9/26	9/27	9/28	9/29 #
	<p><b>CLASS:</b></p> <p>1.) class demo; hanging pulleys (do f.b.d. for each situation); 2.) <i>friction</i> (Richard suggest video of "rodney") 3.) Book Section: 5.8</p>	<p><b>CLASS:</b></p> <p>1.) more on friction--how do you determine direction--block on block problem; 2.) MOB maneuver and <i>centripetal forces</i>; 3.) Book Section: 6.1</p>	<p><b>CLASS:</b></p> <p>1.) center seeking direction using pendulum bob; 2.) car over hill; 3.) car around a banked incline; 4.) Book Section: 6.2</p>	<p><b>CLASS:</b></p> <p>1.) <i>lab: airplane (determine tension in string)</i>; 2.) tension in a string attached to a pail rotating in the vertical; 3.) carnival ride;non-uniform circular motion--radial and tangential accelerations (block against cylinder wall problem); 4.) take data for L- (centripetal force lab)--do write-up on spot; 5.) penny on a turntable demo (if time); 6.) Book Section: 6.3</p>	<p><b>Day 6</b></p>
	<p><b>HMWK:</b></p> <p>1.) do Probs 5.39, 5.42, 5.46, 5.47; <b>OPTIONAL:</b> 2.) if you'd like to see how well you understand N.S.L., there is a nasty problem available for viewing at <i>zPoly: 13 (N.S.L.'s problem with pulley n twist)</i> at <a href="http://www.youtube.com/watch?v=YPIF5BjzTx4">www.youtube.com/watch?v=YPIF5BjzTx4</a></p>	<p><b>HMWK:</b></p> <p>1.) do Probs 6.1, 6.6, 6.8 and 6.9; <b>OPTIONAL:</b> 2.) if you are still having trouble making sense of the direction of kinetic friction, look at <i>zPoly: 12 (kinetic friction via a truck n box problem)</i> at <a href="http://www.youtube.com/watch?v=AN6kwF6RxUQ">www.youtube.com/watch?v=AN6kwF6RxUQ</a></p>	<p><b>HMWK:</b></p> <p>1.) do Probs 6.12, 6.14 and 6.16; <b>OPTIONAL:</b> 2.) if you are still having trouble figuring out the "center seeking" centripetal direction, look at <i>zPoly: 13 (defining axes in centripetal force problems)</i> at <a href="http://www.youtube.com/watch?v=0kYTPQUwibE">www.youtube.com/watch?v=0kYTPQUwibE</a></p>	<p><b>HMWK:</b></p> <p>1.) do Probs 6.17, 6.21 and 6.23; 2.) <i>download LAB--Friction Lab (L-)</i>; 3.) <i>download Practice Test</i></p>	
#	10/2	10/3	10/4	10/5	10/6 #
	<b>TRIPS WEEK:</b>	<b>TRIPS WEEK:</b>	<b>TRIPS WEEK:</b>	<b>TRIPS WEEK:</b>	<b>TRIPS WEEK:</b>
#	10/9	10/10	10/11	10/12	10/13 #

<b>FRANCIS WASS DAY</b>	<b>Day 6</b>	<b>PSAT TESTING</b> (this is Day 1 of the rotation, even though the Upper School doesn't meet)	<b>CLASS:</b> 1.) take half the period to do <i>Friction Lab (L)</i> --do write-up on the spot; 2.) look at mass circling in cylinder problem; 3.) for remainder of class, review for test	<b>L-day 3</b> <b>CLASS:</b> <b>TEST 2</b> (Ch's 5 and 6--Newton's Laws)	
			<b>HMWK:</b> 1.) prepare for test	<b>HMWK:</b> 1.) breath deeply . . .	
#	10/16	10/17	10/18	10/19	10/20 #
	<b>CLASS:</b> 1.) <i>island series LAB (energy)</i> ; 2.) <i>work</i> by constant force; 3.) <i>dot product</i> ; 4.) work done by variable forces; 5.) point out that <b>EXTRA CREDIT</b> is now available from Web site (this will be due NEXT MONDAY) 6.) Book Sections: 7.1, 7.2, 7.3 and 7.4	<b>CLASS:</b> 1.) derive <i>work/energy theorem</i> ; 2.) work done by <i>conservative forces</i> , and <i>potential energy functions</i> ; 3.) Book Sections: 7.5, 7.7 and 7.6	<b>CLASS:</b> 1.) relationship between <i>potential energy functions</i> and their associated <i>conservative forces</i> ; 2.) Book Section: 7.8	<b>CLASS:</b> 1.) energy diagrams and equilibrium of systems; 2.) Book Section: 7.9	
	<b>HMWK:</b> 1.) do Probs 7.1, 7.2, 7.5, 7.9, 7.14, 7.17, 7.21	<b>HMWK:</b> 1.) do Probs 7.31, 7.32, 7.33, 7.35, 7.42	<b>HMWK:</b> 1.) do Probs 7.43, 7.45, 7.47 and 7.49;	<b>HMWK:</b> 1.) do Prob 7.52; 2.) <i>download LAB--Conservation of Energy (Pendulum) Lab (L)</i>	
#	10/23	10/24	10/25	10/26	10/27 #
	<b>L-day 3</b> <b>CLASS:</b> 1.) do <i>Conservation of Energy (Pendulum) Lab (L)</i> ; 2.) <b>EXTRA CREDIT DUE</b>	<b>CLASS:</b> 1.) analysing models for non-isolated systems and isolated systems; 2.) derivation of <i>modified conservation of energy thm</i> ; 3.) Book Sections: 8.1, 8.2, 8.3 and 8.4	<b>CLASS:</b> 1.) do at least three conservation of energy problems, including the problem from hell	<b>CLASS:</b> <b>Day 6</b>	<b>CLASS:</b> 1.) power--AP problem; 2.) Book Section: 8.5
	<b>HMWK:</b> 1.) complete write-up of <i>Conservation of Energy (Pendulum) Lab (L)</i> if not finished in class	<b>HMWK:</b> 1.) do Probs 8.2, 8.3, 8.5 and 8.7	<b>HMWK:</b> 1.) do Probs 8.12, 8.14 and 8.18		<b>HMWK:</b> 1.) do Probs 8.21, 8.22, 8.27, 8.29, 8.30 and 8.37; 2.) <i>download Practice Test</i>
#	10/30	10/31	11/1	11/2	11/3 #
	<b>CLASS:</b> 1.) class review for test	<b>L-day 3</b> <b>CLASS:</b> <b>TEST 3</b> (Ch's 7 and 8--energy)	<b>CLASS:</b> 1.) <i>island series LAB (momentum)</i> ; 2.) introduction of <i>momentum</i> ; 3.) isolated systems versus non-isolated systems; 4.) Book Sections: 9.1, 9.2 and 9.3	<b>CLASS:</b> 1.) derive conservation of momentum; 2.) look at rifle problem; 3.) have students switch with Tuesday's homework; 3.) do <i>Impulse and Momentum Lab (L)</i> (do next Tuesday)	<b>FACULTY WRITING DAY (NO SCHOOL)--</b> (first quarter ends)
	<b>HMWK:</b> 1.) prepare for test	<b>HMWK:</b> 1.) have a very, merry night off . . .	<b>HMWK:</b> 1.) do Probs 9.1, 9.4, 9.5, 9.6 and 9.11; 2.) <i>download LAB--Impulse and Momentum Lab (L)</i>	<b>HMWK:</b> 1.) complete write-up of <i>Impulse and Momentum Lab (L)</i> if not completed in class	

Second Quarter, 2017-2018						
S	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	A
U						T
N						
#	11/6	11/7	11/8	11/9	11/10	#
	<b>Day 6</b>	<b>CLASS:</b> 1.) momentum and collisions in 1-d; 2.) Book Section: 9.4	<b>CLASS:</b> 1.) finish momentum and collisions in 2-d; 2.) Book Section: 9.5	<b>L-day 3</b> <b>CLASS:</b> 1.) do <i>Ballistic Pendulum Lab (L-)</i> --do write-up in class	<b>CLASS:</b> 1.) talk about center of mass; 2.) look at systems with many particles; 3.) Book Sections: 9.6 and 9.7	
		<b>HMWK:</b> 1.) do Probs 9.18, 9.19 and 9.23; <b>OPTIONAL:</b> 2.) if you aren't completely clear as to when you can use cons of energy and when cons of mom, look at the fairly complicated problem at zPoly: 19 (cons. of mom example—cannon and spring) at <a href="https://youtu.be/uKfQhCOW-Eo">https://youtu.be/uKfQhCOW-Eo</a>	<b>HMWK:</b> 1.) do Probs 9.27, 9.29 and 9.33; 2.) download LAB-- <i>Ballistic Pendulum Lab (L-)</i> ; <b>OPTIONAL:</b> 3.) if you'd like to see another complicated cons of momentum and energy problem, look at zPoly: 20 (block on block w spring) at <a href="https://youtu.be/_vffPexYS4I">https://youtu.be/_vffPexYS4I</a>	<b>HMWK:</b> 1.) complete <i>Ballistic Pendulum Lab (L-)</i> if not done so in class	<b>HMWK:</b> 1.) do Probs 9.36, 9.37, 9.38, 9.40, 9.41 and 9.43	
#	11/13	11/14	11/15	11/16	11/17	#
	<b>CLASS:</b> 1.) review for test; 2.) play face ball	<b>Day 6</b>	<b>CLASS:</b> <b>TEST 4</b> (Ch 9-- Momentum) <b>REDO ORDER AND HOMEWORK OF NEXT SEVERAL DAYS</b>	<b>CLASS:</b> 1.) <i>island series LAB</i> (rotational parameters); 2.) rotational kinematics; 3.) relationship between rotational and translational paramters; 4.) <b>check to see how homework matches up-- days went out of sequence!</b> 4.) Book Sections: 10.1, 10.2 and 10.3	<b>L-day 3</b> <b>CLASS:</b> 2.) calculating moment of inertia of discrete mass; 3.) calculating moment of interia of continuous distribution; 4.) Book Sections: 10.4 and 10.5	
	<b>HMWK:</b> 1.) prepare for test; 2.) <b>CHIPOTLE NIGHT</b> will happen Tuesday night between 5:00 PM and 7:00 PM	<b>Chipotle night</b>	<b>HMWK:</b> 1.) nothing happening but sleep and a good book	<b>HMWK:</b> 1.) do Probs 10.1, 10.3, 10.5, 10.7, 10.11, 10.13, 10.17, 10.18 and 10.21; <b>OPTIONAL:</b> 2.) if you want more on the bizarre minutia you need to be aware of concerning rotational motion, look at zPoly: 22 (rotational machinations) at <a href="http://youtu.be/9ZpLQ1TWREY">http://youtu.be/9ZpLQ1TWREY</a>	<b>HMWK:</b> 1.) do Probs 10.25, 10.27 and 10.29	
#	11/20	11/21	11/22	11/23	11/24	#
	<b>CLASS:</b> 1.) torque; 2.) cross products; 3.) Rigid Body problems 4.) Book Sections: 10.6 and 10.7	<b>CLASS:</b> 1.) 1.) rotational kinetic energy and derivation of moment of inertia; 2.) talked about moment of inertia;	<b>THANKSGIVING</b>	<b>THANKSGIVING</b>	<b>THANKSGIVING</b>	

	<p><b>HMWK:</b> 1.) do Probs 10.31, 10.33, 10.35 and 10.36; <b>OPTIONAL:</b> 2.) I'd <b>STRONGLY SUGGEST</b> you view at least the first two minutes of this video on rigid bodies at zPoly: 21 (rigid body beam problem) at <a href="http://youtu.be/aeXb6xLibGk">http://youtu.be/aeXb6xLibGk</a> <b>OPTIONAL:</b> 3.) if you'd like to see a more complicated rigid body problem, look at zPoly: 23 (complex rotating beam problem and NSL) at <a href="http://youtu.be/om8pQ0j8Hg0">http://youtu.be/om8pQ0j8Hg0</a></p>	<p><b>HMWK:</b> 1.) talked about both N.S.L. and energy considerations via the pinned beam problem; 2.) talked about rolling motion of a rolling object; discuss <b>Rolling Objects Lab (L-)</b>; 3.) Book Sections: 10.8 and 10.9</p>			
#	11/27	11/28	11/29	11/30	12/1 #
	<p><b>Day 6</b></p>	<p><b>CLASS:</b> 1.) talked about both N.S.L. and energy considerations via the pinned beam problem; 2.) talked about rolling motion of a rolling object; discuss <b>Rolling Objects Lab (L-)</b>; 3.) Book Sections: 10.8 and 10.9</p>	<p><b>CLASS:</b> 1.) showed disk and hoop down incline demo; 2.) do yoyo problem; 3.) do ball down incline problem both ways</p>	<p><b>L-day 3</b> <b>CLASS:</b> 1.) start <b>Rolling Objects Lab (L-)</b></p>	<p><b>CLASS:</b> 1.) continue <b>Rolling Objects Lab (L-)</b></p>
		<p><b>HMWK:</b> 1.) do Probs 10.38, 10.39, 10.40, 10.45, 10.49; <b>OPTIONAL:</b> 2.) <b>STRONGLY SUGGESTED:</b> if you'd like to see a complicated cons of energy problem with rotation, look at zPoly: 26 (cons of energy with rotation--complex beam problem) block on block w spring) at <a href="http://youtu.be/Qmn0tci5WC0">http://youtu.be/Qmn0tci5WC0</a></p>	<p><b>HMWK:</b> 1.) do Probs 10.51, 10.55, 10.57 and 10.61; <b>OPTIONAL:</b> 2.) if you'd like to see a complicated N.S.L. problem with rotation, look at zPoly: 25 (complex NSL ball, pulley and incline plane) at <a href="http://youtu.be/UOHClCQ1B_4">http://youtu.be/UOHClCQ1B_4</a></p>	<p><b>HMWK:</b> 1.) process results from <b>Rolling Objects Lab (L-)</b>, continue with write-up</p>	<p><b>HMWK:</b> 1.) do Probs 11.1, 11.3, 11.5, 11.7, 11.11, 11.12, 11.15 (these were messed up as we didn't talk about angular momentum today--the problem cascaded all the way into next week)</p>
#	12/4	12/5	12/6	12/7	12/8 #
	<p><b>CLASS:</b> 1.) angular momentum of rotating object; 2.) angular momentum without external forces (in an isolated system); 3.) Book Section: 11.1 and 11.3 and 11.4</p>	<p><b>Day 6</b></p>	<p><b>CLASS:</b> 1.) angular momentum problem solving session</p>	<p><b>CLASS:</b> 1.) angular momentum problem solving session</p>	<p><b>L-day 3</b> <b>CLASS:</b> 1.) all of Ch 12</p>
	<p><b>HMWK:</b> 1.) do Probs 11.22, 11.25 and 11.30</p>		<p><b>HMWK:</b> 1.) do Probs 11.1, 11.5, 11.11, 11.12, 11.15, 11.25;</p>	<p><b>HMWK:</b> 1.) do Probs 11.30, 11.31, 11.35 and 11.37; 2.) <b>CHIPOTLE NIGHT</b> from 5:00 PM to 7:00 PM</p>	<p><b>HMWK:</b> 1.) relax, kick back, get some sleep . . Get ready for test on Monday--Chipotle night with Mr. White on Sunday from 6 to 8 pm.</p>
#	12/11	12/12	12/13	12/14	12/15 #
	<p><b>CLASS:</b> <b>TEST 5</b> (Ch's 10 and 11-- rotational motion)--this has been put off by one day</p>	<p><b>CLASS:</b> 1.) Newton's Law of Universal Gravitation; 2.) Measuring the Gravitational Constant; 3.) free falling acceleration and gravitational force; 4.) Book Sections: 13.1, 13.2 and 13.3</p>	<p><b>Day 6</b></p>	<p><b>CLASS:</b> 1.) gravitational fields; 2.) gravitational potential energy; 3.) Book Sections: 13.5 and 13.6</p>	<p><b>CLASS:</b> 1.) energy considerations in planetary and satellite motion; 2.) AP problems;</p>

	<b>HMWK:</b> 1.) do Probs 12.3,12.5, 12.7, and 12.13	<b>HMWK:</b> 1.) do Prob 13.3, 13.5, 13.10 and 13.12		<b>HMWK:</b> 1.) do Prob 13.25, 13.26, 13.28, 13.31	<b>HMWK:</b> 1.) do Prob 13.34, 13.36, 13.39
#	12/18	12/19	12/20	12/21	12/22 #
	<b>L-day 3</b> <b>CLASS:</b> 1.) Hooke's Law Lab (L-); 2.) motion of an object attached to a spring; 3.) mathematical representation of simple harmonic motion; 4.) Book Sections 15.1, 15.2	<b>CLASS:</b> 1.) energy of simple harmonic oscillator; 2.) the pendulum; 3.) Book Section 15.3 and 15.5	<b>CLASS:</b> 1.) continuing with osc. Motion	<b>Day 6</b>	<b>CLASS: (day 1 schedule)</b> 1.) <b>SPEED TEST</b> or off-the-wall presentation
	<b>HMWK:</b> 1.) do Probs 15.1, 15.3, 15.5, 15.9, 15.13;	<b>HMWK:</b> 1.) do Prob's 15.17, 15.19, 15.22, 15.31, 15.33	<b>HMWK:</b> 1.) relax		<b>HMWK:</b> 1.) relax
#	12/25	12/26	12/27	12/28	12/29 #
	<b>Winter Break</b> (SNOW?)	<b>Winter Break</b> (SNOW?)	<b>Winter Break</b> (SNOW?)	<b>Winter Break</b> (SNOW?)	<b>Winter Break</b> (SNOW?)
#	1/1	1/2	1/3	1/4	1/5 #
	<b>Winter Break</b> (SNOW?)	<b>Winter Break</b> (SNOW?)	<b>Winter Break</b> (SNOW?)	<b>Winter Break</b> (SNOW?)	<b>Winter Break</b> (SNOW?)
#	1/8	1/9	1/10	1/11	1/12 #
	<b>CLASS: (day 2 schedule)</b> 1.) class review for exam	<b>L-day 3</b> <b>CLASS:</b> 1.) Review for Exam	<b>CLASS:</b> <b>TEST 6</b> (Ch's 11, 12 and 13 and 11-- rigid bodies, gravitation and oscillation)	<b>CLASS:</b> 1.) Review for Exam	<b>Day 6 (last day of class)</b>
	<b>HMWK:</b> 1.)	<b>HMWK:</b> 1.)	<b>HMWK:</b> 1.)	<b>HMWK:</b> 1.)	
#	1/15	1/16	1/17	1/18	1/19 #
	<b>MLK Jr Holiday</b>	<b>CLASS:</b> 1.) review for Exam	<b>CLASS:</b> 1.) review for Exam	<b>SEMESTER EXAMS</b> today's the day!!!!	<b>SEMESTER EXAMS</b>
		<b>HMWK:</b> 1.)	<b>HMWK:</b> 1.)		

Third Quarter, 2017-2018						
S	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	A
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N						
#	1/22	1/23	1/24	1/25	1/26	#
	<b>SEMESTER EXAMS</b>	<b>SEMESTER EXAMS</b>	<b>CLASS: (start Semester 2)</b> (day 1 of rotation) 1.) Properties of Electric Charge; 2.) Charging Objects by Induction; 3.) Coulomb's Law; 4.) Book Sections 23.1, 23.2 and 23.3  <b>HMWK:</b> 1.) do Prod's 23.4, 23.10, 23.8, 23.15, 23.17 not 23.7, 23.13	<b>CLASS:</b> 1.) The Electric Field; 2.) Electric Field of a Continuous Charge Distribution; 3.) Book Sections 23.4 and 23.5  <b>HMWK:</b> 1.) do Prob's 23.21, 23.24, 23.29, 23.31, 23.35 (derive this), 23.37; not 23.29, 23.31 2.) EXTRA STUFF: Fletch's video zPoly: 34 (electric fields in general form) found at <a href="http://youtu.be/L_j2ya5RjmY">http://youtu.be/L_j2ya5RjmY</a>	<b>L-day 3</b> <b>CLASS:</b> 1.) Electric Field Lines; 2.) Motion of Charged Particles in a Uniform Electric Field 3.) Book Sections 23.6 and 23.7  <b>HMWK:</b> 1.) do over next two days Prob's 23.40, 23.41, 23.43, 23.45, 23.47, 23.49; not 23.39, 23.43	
	1/29	1/30	1/31	2/1	2/2	
Test Week	<b>CLASS:</b> 1.) Electric Fields continued  <b>HMWK:</b> 1.) catch up if need be	<b>CLASS:</b> 1.) <i>Lab-Electric Fields</i>  <b>HMWK:</b> 1.) prepare for test	<b>Day 6</b>  <b>CHIPOTLE NIGHT--5 pm to 7 pm</b>	<b>CLASS:</b> 1.) Review for Test  <b>HMWK:</b> 1.) prepare for test	<b>CLASS:</b> <b>TEST 7</b> (Ch 23--static electricity)  <b>HMWK:</b> 1.) relax	
	2/5	2/6	2/7	2/8	2/9	
	<b>L-day 3</b> <b>CLASS:</b> 1.) Electric Flux; 2.) Gauss's Law; 3.) Application of Gauss's Law to Various Charge Distributions; 4.) Book Sections 24.1, 24.2 and 24.3  <b>HMWK:</b> 1.) do Prob's 24.1, 24.6, 24.7, 24.9, 24.11, 24.17; not 24.3 and 24.18	<b>CLASS:</b> 1.) More Gaussian charge distributions  <b>HMWK:</b> 1.) do Prob's 24.23, 24.27, 24.29, 24.33	<b>CLASS:</b> 1.) Conductors in Electrostatic Equilibrium. Lab-Millikan's Oil Drops; 2.) Book Section 24.4  <b>HMWK:</b> 1.) do Prob's 24.35, 24.37, 24.39, 24.43, 24.44	<b>Day 6</b>	<b>CLASS:</b> 1.) Electric Potential & Potential Difference; 2.) Potential Difference in a Uniform Electrical Field; 3.) Electric Potential and Potential Energy Due to Point Charges; 4.) Book Section 25.1, 25.2 and 25.3  <b>HMWK:</b> 1.) do Prob's 25.1, 25.3, 25.5, 25.9, 25.14, 25.15, 25.20; not 25.8, 25.11, 25.18 and 25.22; 2.) EXTRA STUFF: Fletch's video zPoly: 35 (absolute electrical potentials in general) found at <a href="http://youtu.be/Cyplz6afxMQ">http://youtu.be/Cyplz6afxMQ</a>	
	2/12	2/13	2/14	2/15	2/16	
	<b>CLASS:</b> 1.) Obtaining the Value of the Electric Field from the Electric Potential; 2.) Electric Potential Due to Continuous Charge Distributions; 3.) Electric Potential Due to a Charged Conductor; 4.) Book Sections 25.4, 25.5 and 25.6  <b>HMWK:</b> 1.) do Prob's 25.33, 25.35, 25.39, 25.42, 25.44, 25.45, 25.48	<b>L-day 3</b> <b>CLASS:</b> 1.) Overflow  <b>HMWK:</b> 1.) do Prob's 25.40, 25.42, 25.44, 25.45, 25.48	<b>CLASS:</b> 1.) <i>Lab-Electric Potential</i>  <b>HMWK:</b> 1.) Complete write-up if need be	<b>CLASS:</b> 1.) <i>Lab-Simple Circuits</i>  <b>HMWK:</b> 1.) Complete write-up if not finished in class	<b>FACULTY PROFESSIONAL GROWTH DAY</b> (no school)	
	2/19	2/20	2/21	2/22	2/23	

<b>PRESIDENT'S DAY</b> (no school--again, you lucky ducks)	<b>Day 6</b>	<b>CLASS:</b> 1.) review for test	<b>CLASS:</b> <b>TEST 8</b> (Ch 24 and 25-- Gauss's Law and electrical potentials)	<b>L-day 3</b> <b>CLASS:</b> 1.) Definition of Capacitance; 2.) Calculating Capacitance. Computer Models of Capacitance; 3.) Book Sections 26.1 and 26.2		
	<b>CHIPOTLE NIGHT 5 pm TO 7 pm</b>	<b>HMWK:</b> 1.) study for test	<b>HMWK:</b> 1.) relax	<b>HMWK:</b> 1.) do Prob's 26.1, 26.5, 26.11		
#	2/26	2/27	2/28	3/1	3/2 #	
<b>CLASS:</b> 1.) Combination of Capacitors; 2.) <b>Capacitor lab</b> (not on Richard's calendar) 3.) Book Section 26.3	<b>CLASS:</b> 1.) Energy Stored in a Charged Capacitor; 2.) Capacitors w/ Dielectrics. Demo of Capacitor Discharge; 3.) Book Section 26.4 and 26.5	<b>Day 6</b>	<b>CLASS:</b> 1.) Electric Current; 2.) Resistance; 3.) Resistance and Temperature; 4.) <b>Extra Credit available</b> 5.) Book Section 27.1, 27.2 and 27.4	<b>CLASS:</b> 1.) Electrical Power; 2.) Electromotive Force; 3.) Resistors in Series and Parallel. Demo-Series & Paralle; 4.) Book Section 27.6, 28.1 and 28.2		
<b>HMWK:</b> 1.) do Prob's 26.13, 26.16, 26.23, 26.24; not 26.27	<b>HMWK:</b> 1.) do Prob's 26.31, 26.33, 26.34, 26.37, 26.42, 26.46; not 26.36 and 26.45; 2.) <b>EXTRA STUFF:</b> Fletch's video <b>zPoly: 41 (dielectrics and capacitors)</b> at <a href="http://youtu.be/BpbYtwHbwZc">http://youtu.be/BpbYtwHbwZc</a>		<b>HMWK:</b> 1.) do Prob's 27.7, 27.12, 27.14, 27.15, 27.23; not 27.11; 2.) <b>EXTRA STUFF:</b> Fletch's video <b>zPoly: 39 (seat of the pants DC circuit analysis)</b> at <a href="https://www.youtube.com/watch?v=KmIJMgsvFSI">https://www.youtube.com/watch?v=KmIJMgsvFSI</a>	<b>HMWK:</b> 1.) do Prob's 27.29, 27.33, 27.35, 27.39; not 27.45		
#	3/5	3/6	3/7	3/8	3/9 #	
<b>L-day 3</b> <b>CLASS:</b> 1.) really big test . . . HUGE test . . . IMMENSELY HUGE test that will determine whether you graduate . . .	<b>CLASS:</b> 1.) Kirchoff's Rules; 2.) Book Section 2.83	<b>CLASS:</b> 1.) <b>Kirchoff's lab?</b> (not on Richard's calendar); 2.) Kirchoff's Rules; 3.) <b>Box Circuits lab</b>	<b>Day 6</b>	<b>CLASS:</b> 1.) RC circuits		
<b>HMWK:</b> 1.) do Prob's 28.1, 28.5, 28.6, 28.8, 28.9, 28.17	<b>HMWK:</b> 1.) do Prob's 28.21, 28.24, 28.27,	<b>HMWK:</b> 1.) do Prob's 28.32, 28.34; 2.) <b>EXTRA STUFF:</b> Fletch's video on Kirchoff's Law at <b>zPoly: 40 (Kirchoff's Law)</b> <a href="http://www.youtube.com/watch?v=KmIJMgsvFSI">www.youtube.com/watch?v=KmIJMgsvFSI</a>		<b>HMWK:</b> 1.) Complete lab if not done in class		
#	3/12	3/13	3/14	3/15	3/16 #	
<b>CLASS:</b> 1.) Lab-RC Circuits; 2.) <b>Extra Credit Due</b> (or is it later?)	<b>L-day 3</b> <b>CLASS:</b> 1.) Galvanometers, Ammeters, Voltmeters. 2.) Household Wiring & Electrical Safety; 3.) Book Section 28.5	<b>CLASS:</b> <b>TEST 9</b> (Ch 26, 27 and 28--capacitors, circuits and Kirchoff's Laws)	<b>CLASS:</b> 1.) Intro to Air Friction Activity	<b>Day 6</b> (third quarter ends)		
<b>HMWK:</b> 1.) do Prob 28.42; 2.) <b>CHIPOTLE NIGHT from 5 pm to 7 pm</b>	<b>HMWK:</b> 1.) review for test	<b>HMWK:</b> 1.) relax	<b>HMWK:</b> 1.) <b>FIXED TO HERE</b>			
<b>Fourth Quarter, 2017-2018</b>						
<b>S</b>	<b>MONDAY</b>	<b>TUESDAY</b>	<b>WEDNESDAY</b>	<b>THURSDAY</b>	<b>FRIDAY</b>	<b>S</b>
<b>U</b>						<b>A</b>
<b>N</b>						<b>T</b>
#	3/19	3/20	3/21	3/22	3/23	#



FACULTY WRITING DAY (no school)	<b>CLASS:</b> 1.) Air Friction Activity	<b>CLASS:</b> 1.) Magnetic Fields & Forces; 2.) Motion of a Charged Particle in a Uniform Magnetic Field. Demo: Magnetic Force on moving charge. 3.) Book Sections 29.1 and 29.2	<b>L-day 3</b> <b>CLASS:</b> 1.) Applications Involving charged Particles Moving in a Magnetic Field; 2.) Magnetic Force Acting on a Current-Carrying Conductor. Demo: Force on current-carrying wire 3.) Book Sections 29.3 and 29.4	<b>CLASS:</b> 1.) Torque on a Current Loop in a Uniform Magnetic Field; 2.) galvanometers; 3.) book section 29.5	
	<b>HMWK:</b> 1. Carefully read the Magic Mountain assignment. If you aren't familiar with the specific ride, feel free to Google it so you have an idea of what it's like and the physical motion of the ride at the particular point we ask about. 2. State your question. For the question: a. What principle(s) can be used to find a solution? How will they be helpful? What assumptions do you need to make to use them? Are those assumptions reasonable? b. What measurement(s) will you need to take in order to use those principles? How will you take those measurements? How will you ensure they are as accurate as possible?	<b>HMWK:</b> 1.) do Prob's 29.2, 29.6, 29.8, 29.9, 29.13, 29.15, 29.19	<b>HMWK:</b> 1.) do Prob's 29.24, 29.29, 29.35, 29.37; 2.) <b>EXTRA STUFF:</b> Fletch's video zPoly: 43 (B-fields and current-carrying wires) at <a href="https://www.youtube.com/watch?v=0Z2ku_T-0GE">https://www.youtube.com/watch?v=0Z2ku_T-0GE</a>	<b>HMWK:</b> <b>HAVE A GREAT SPRING BREAK</b>	
#	3/26	3/27	3/28	3/29	3/30 #
	Spring Break	Spring Break	Spring Break	Spring Break	Spring Break
#	4/2	4/3	4/4	4/5	4/6 #
<b>CLASS:</b> Class trip: Magic Mountain field trip	Day 6	<b>CLASS:</b> 0.) ask who has a test on 5/2 in Calc BC during A per (like to put test off one day); 1.) quick review; 2.) Hall Effect; 3.) rod down incline prob; 4.) devices based on B-flds; 5.) Book Sections 29.6	<b>CLASS:</b> 1.) Lab: Drawing Magnetic Field lines	<b>L-day 3</b> <b>CLASS:</b> 1.) Magnetism in Matter; 2.) Biot-Savart Law; 3.) The Magnetic Force Between Two Parallel Conductors; 4.) Book Sections 30.6, 30.1 and 30.2	
<b>HMWK:</b> 1.) complete MM write-up		<b>HMWK:</b> 1.) do Prob's 29.44, 29.47, 29.51 2.) <b>EXTRA STUFF:</b> Fletch's video zPoly: 50 (mass spectrometer) at <a href="https://youtu.be/mnhh0uRvQ2o">https://youtu.be/mnhh0uRvQ2o</a>	<b>HMWK:</b> 1.) do Prob's 30.39, 30.45, 30.47	<b>HMWK:</b> 1.) do Prob's 30.2, 30.3, 30.5, 30.13, 30.23	
#	4/9	4/10	4/11	4/12	4/13 #
<b>CLASS:</b> 1.) Ampere's Law 3.) Book Section 30.3	<b>CLASS:</b> 1.) The Magnetic Field of a Solenoid; 2.) Gauss's Law in Magnetism; 3.) book sections 30.4 and 30.5	Day 6	<b>CLASS:</b> 1.) review for exam	<b>CLASS:</b> <b>TEST 10</b> (magnetic fields)	
<b>HMWK:</b> 1.) do Prob's 30.29, 30.32, 30.34, 30.36	<b>HMWK:</b> 1.) do Prob's 30.39, 30.45, 30.47		<b>HMWK:</b> 1.) prepare for test	<b>HMWK:</b> 1.) relax	
#	4/16	4/17	4/18	4/19	4/20 #

	<b>L-day 3</b> <b>CLASS:</b> 1.) island series-- induction; 2.) intro to induction; 3.) Lab--Faraday's Law	<b>CLASS:</b> 1.) Faraday's Law of Induction; 2.) Motional emf; 3.) book sections 31.1 and 31.2	<b>CLASS:</b> 1.) Lenz's Law; 2.) book section 31.3	<b>Day 6</b>	<b>CLASS:</b> 1.) Eddy Currents; DEMO-Eddy Currents; 2.) Self-Inductance; 3.) book section 31.6 and 32.1
	<b>HMWK:</b> 1.) complete Faraday's Law lab to be turned in tomorrow	<b>HMWK:</b> 1.) do Prob's 31.6, 31.9, 31.14; 2.) EXTRA STUFF: Fletch's video zPoly: 45 (motional EMS's) at <a href="https://youtu.be/SK2CraiWk0U">https://youtu.be/SK2CraiWk0U</a>	<b>HMWK:</b> 1.) do Prob's 31.20, 31.23, 31.25, 31.30		<b>HMWK:</b> 1.) do Prob 31.44
#	4/23	4/24	4/25	4/26	4/27 #
	<b>CLASS:</b> 1.) RL circuits; 2.) book section 32.2	<b>L-day 3</b> <b>CLASS:</b> 1.) energy in a Magnetic Field; 2.) book section 32.3	<b>CLASS:</b> 1.) review for test	<b>CLASS:</b> 1.) we'll see	<b>Day 6</b>
	<b>HMWK:</b> 1.) do Prob's 32.3, 32.7, 32.10, 32.14	<b>HMWK:</b> 1.) do Prob's 32.16, 32.17, 32.21	<b>HMWK:</b> 1.) review for the test	<b>HMWK:</b> 1.)	
#	4/30	5/1	5/2	5/3	5/4 #
	<b>FRANCIS WASS DAY</b>	<b>CLASS:</b> 1.) Review for Exam; Free Response	<b>CLASS:</b> <b>TEST 11</b> (Faraday's Law and induction)	<b>L-day 3</b> <b>CLASS:</b> 1.) Review for Exam; Multiple Choice	<b>CLASS:</b> 1.) Review for Exam; Free Response
		<b>HMWK:</b> 1.)	<b>HMWK:</b> 1.)	<b>HMWK:</b> 1.)	<b>HMWK:</b> 1.)
#	5/7	5/8	5/9	5/10	5/11 #
	<b>AP exams: (Spanish Lit in AM, Psych in PM)</b> <b>CLASS:</b> 1.) Review for Exam; Multiple Choice	<b>AP exams: (Spanish Lang in AM, Art Hist in PM)</b> <b>Day 6</b>	<b>AP exams: (Engl Lit in AM, Japanese Lang in PM)</b> <b>CLASS:</b> Don't meet	<b>AP exams: (U.S. Govt in AM, Chinese Lang in PM)</b> <b>CLASS:</b> 1.) Review for Exam; Multiple Choice	<b>AP exams: (U.S. Hist in AM, Comp Sci Principles in PM)</b> <b>L-day 3</b> <b>CLASS:</b> 1.) Review for Exam; Free Response
	<b>HMWK:</b> 1.)		<b>HMWK:</b> 1.)	<b>HMWK:</b> 1.)	<b>HMWK:</b> 1.)
#	5/14	5/15	5/16	5/17	5/18 #
	<b>AP exams: (Bio and Music Theory in AM, Physics C-Mechanics AND Physics C-E&amp;M in PM)</b> <b>CLASS:</b> 1.) pray a lot	<b>AP exams: (Calc in AM, French Lang and Comp Sci A in PM)</b> <b>CLASS:</b> 1.)	<b>AP exams: (Engl Lang in AM, Macro Econ in PM)</b> <b>Day 6</b>	<b>AP exams: (World Hist in AM, Statistics in PM)</b> <b>CLASS:</b> 1.)	<b>AP exams: (Micro Econ in AM, Latin in PM)</b> <b>CLASS:</b> 1.)
	<b>HMWK:</b> 1.)	<b>HMWK:</b> 1.)		<b>HMWK:</b> 1.)	<b>HMWK:</b> 1.)
#	5/21	5/22	5/23	5/24	5/25 #
	<b>L-day 3</b> <b>CLASS:</b> 1.)	<b>CLASS:</b> 1.)	<b>CLASS:</b> 1.)	<b>Day 6</b>	<b>CLASS: (day 1 schedule)</b> 1.)
	<b>HMWK:</b> 1.)	<b>HMWK:</b> 1.)	<b>HMWK:</b> 1.)		<b>HMWK:</b> 1.)
#	5/28	5/29	5/30	5/31	6/1 #
	<b>Memorial Day Holiday SENIOR TRIP</b>	<b>Finals SENIOR TRIP</b>	<b>Finals SENIOR TRIP</b>	<b>Finals SENIOR TRIP</b>	<b>Finals SENIOR TRIP</b>