

2019-2020 {Content/ Grade Level} Hilsman – 3rd Quarter at a Glance

Teacher(s):	Mosley, Zwald			
Content Area:	HS Science	Grade Level:	8	

Macro Calendar:

January 2020

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1	6 Compounds and Conductivity	7 Compounds and Conductivity	8 CER: Why did the Gatorade light up?	9 Reaction in a Bag – LOCM	10 Weekly Quiz LOCM Analysis Questions
Week 2	13 Balance Chemical equations- Phet & Notes	14 Balancing Practice	15 Balance Chemical equations- Quiz	16 Types of Reactions	17 Weekly Quiz Review
Week 3	20 NO SCHOOL!	21 Review	22 Unit 4 NB Test	23 Unit 4 Test	24 Solutions/Concentration PhET
Week 4	27 Elements, Compounds, and Mixtures	28 Solutions/Dissolving Lab	29 Solubility Curve	30 Solubility Curve	31 Weekly Quiz pH Scale, Acids and bases

February 2020

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 5	3 Acids/Bases Lab	4 Mystery Substances – Mini Research Project	5 Review	6 Unit 5 NB Test	7 Unit 5 Test

Week 6	10 Electricity Intro What is a circuit? Finish test	11 Cedar Shoals Field Trip Review	12 Electromagnets Lab Electric and Magnetic Fields	13 Electromagnets	14 Weekly Quiz Faraday's Law PhET
Week 7	17 Building Professional Learning	18 Static Electricity Circuits Lab	19 Series and Parallel Circuits AC/DC	20 Cedar People coming	21 Weekly Quiz V=IR – Ohm's Law
Week 8	24 V=IR – Ohm's Law	25 Review	26 Unit 6 NB Test	27 Unit 6 Test	28

March 2020

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 9	2 Apple in the Dark Mystery Boxes	3 Waves	4 ½ Day: Parent-Teacher Conferences Light Behavior Lab	5 Parent-Teacher Conferences: No students! For Q4: Light behavior reading	6 NO SCHOOL!

Weekly Collaborative Plans

<h1>Week 1</h1> <h2>January 6–10</h2>	
EQ's	Monday: What happens to different types of bonds when placed in water? Tuesday: What is an electrolyte? Wednesday: Why did the lightbulb light up? Thursday: Where did the gas come from? Friday: How does the mass of reactants compare to the mass of products?
Standards:	<ul style="list-style-type: none"> SPS2. Obtain, evaluate, and communicate information to explain how atoms bond to form stable compounds.

	<ul style="list-style-type: none"> ○ a. Analyze and interpret data to predict properties of ionic and covalent compounds. (Clarification statement: Properties are limited to types of bonds formed, elemental composition, melting point, boiling point, and conductivity.) ● SPS3. Obtain, evaluate, and communicate information to support the Law of Conservation of Matter. <ul style="list-style-type: none"> ○ a. Plan and carry out investigations to generate evidence supporting the claim that mass is conserved during a chemical reaction (Clarification statement: Limited to synthesis, decomposition, single replacement, double replacement reactions). ○ b. Develop and use a model of a chemical equation to illustrate how the total number of atoms is conserved during a chemical reaction. (Clarification statement: Limited to chemical equations that include binary ionic and covalent compounds and will not include equations containing polyatomic ions.) 				
Success Criteria:	<p>Monday: I can describe what happens to ionic and covalent bonds in water.</p> <p>Tuesday: I can explain what an electrolyte is.</p> <p>Wednesday: I can explain which substance made the lightbulb light up and why.</p> <p>Thursday: I can define the LOCM.</p> <p>Friday: I can explain what happens to the mass of reactants and products in chemical reactions.</p>				
	Monday	Tuesday	Wednesday	Thursday	Friday
Bellringer	6 DSP	7 DSP	8 DSP	9 DSP	10 DSP
Opening (Strategies)	<p>Revisit Gatorade demo</p> <p>Remind students that while it was not a single substance (salt, water, or sugar) that caused the build to light up, it is a combination of two substances.</p>	<p>Recap Solutions PhET to talk about what it showed</p>	<p>Dogs Teaching Chemistry- Types of Bonds</p>	<p>Directions: Reaction in a bag Lab- where did the gas come from?</p>	<p>Recap of Reaction in a Bag Lab</p>
Transition to Work Session	<p>Have students use the conductivity meters to test the different combinations of substances.</p> <p>Have students share their findings.</p>	<p>Share with students that salt, like all ionic compounds, dissociates in water; whereas, sugar, like all covalent compounds, does not.</p> <p>Show students this dissociation video. This video will help students see that when an ionic compound</p>	<p>Reminder about CER process- brainstorm as a class what list of vocabulary needs to be included in their CER</p>	<p>Set up for Lab!</p>	<p>Set Up for Lab</p>

		dissociates, it separates into its ions.			
WICOR strategy (Strategies)	I-Inquiry	W-Focused Notetaking	W-Writing	I-Inquiry	I-Inquiry
Work Session	<p>As a demonstration on the board, lead students through the Sugar and Salt Solutions PhET Simulation.</p> <ul style="list-style-type: none"> • After opening the phET, click the "Micro" tab. • Select "Sucrose." • Add sucrose to the water. Ask students to record their observations. • Reset using the button in the bottom right corner. • Select "Salt." <p>Add salt to the water. Ask students to record their observations.</p>	<p>Ask students to read this article about electrolytes. It will help students understand the role of ions in making the light bulb light up.</p> <p>Add notes into notebook from reading</p> <p>Practice determining which compounds will form electrolyte solutions</p>	<p>CER- Why did the light bulb light up?</p> <p>Students will also draw a model of what was the cause for the light bulb lighting up.</p>	Completion of lab and answer analysis questions	<p>LOCM Lab</p> <p>Analysis Questions</p> <p>Weekly Quiz</p>
Personalization/ Differentiation					
Summary/ Assessment (Strategies)	TOTD: How did the pHet help explain why the lightbulb did or didn't light up?	Ask students to revise their models to accurately reflect the system.	Review of models as a class	Analysis of lab- review as a class. What did we find?	Review over analysis questions: What happens to mass during a chemical reaction?
Homework (optional)	Week 1 HW				
Additional Resources for students & parents					

Week 2

January 13-17

EQ's	Monday: What does the Law of Conservation of Matter state? Tuesday: What are the parts of a chemical equation? Wednesday: How do I balance chemical equations? Thursday: How can I determine what kind of chemical reaction is occurring? Friday: How can I determine what kind of chemical reaction is occurring?				
Standards:	<ul style="list-style-type: none"> SPS2. Obtain, evaluate, and communicate information to explain how atoms bond to form stable compounds. <ul style="list-style-type: none"> a. Analyze and interpret data to predict properties of ionic and covalent compounds. (Clarification statement: Properties are limited to types of bonds formed, elemental composition, melting point, boiling point, and conductivity.) SPS3. Obtain, evaluate, and communicate information to support the Law of Conservation of Matter. <ul style="list-style-type: none"> a. Plan and carry out investigations to generate evidence supporting the claim that mass is conserved during a chemical reaction (Clarification statement: Limited to synthesis, decomposition, single replacement, double replacement reactions). b. Develop and use a model of a chemical equation to illustrate how the total number of atoms is conserved during a chemical reaction. (Clarification statement: Limited to chemical equations that include binary ionic and covalent compounds and will not include equations containing polyatomic ions.) 				
Success Criteria:	Monday: I can explain the Law of Conservation of Matter Tuesday: I can state the different parts of a chemical equation. Wednesday: I can balance a chemical equation. Thursday: I can distinguish between the 4 types of chemical equations Friday: I can determine which type of equation is occurring and I can balance it as needed.				
	Monday	Tuesday	Wednesday	Thursday	Friday
Bellringer	13 DSP	14 DSP	15 DSP	16 DSP	17 DSP
Opening (Strategies)	LOCM Lab Analysis Questions Balance beam video- what does it mean to be balanced?	Atom/Food Inventory Picture	Quick review over how to balance chemical equations	Slideshow pictures	Review of balancing equations and types of equations
Transition to Work Session	Students will get time to explore the pHet and	Continued work with balancing chemical	Directions for practice work	Types of reactions	Quiz and Practice instructions

	see if they can begin to understand how to balance chemical equations.	equations: Is it balanced or not? How to add in coefficients			
WICOR strategy (Strategies)					
Work Session	Parts of a chemical equation notes and taking atom inventory practice	Practice work with balancing equations	Practice work with balancing equations	Practice with types of reactions	Weekly Quiz and practice
Personalization/ Differentiation		Students will either get an extended practice with atom inventory or move on.	Extended practice for balancing chemical equations	Some students will be review balancing equations while others get more work with types of equations	
Summary/ Assessment (Strategies)	Review over parts of a chemical equation	TOTD: Google form	Review Practice Problems	Review Practice Problems	Questions about this week's content
Homework (optional)	Week 2 HW				Study Guide
Additional Resources for students & parents					

Week 3

January 20-24

EQ's	<p>Monday: No school!</p> <p>Tuesday: How can we develop and use models to illustrate how atoms are conserved during a chemical reaction?</p> <p>Wednesday: How can we develop and use models to illustrate how atoms are conserved during a chemical reaction?</p> <p>Thursday: How can we develop and use models to illustrate how atoms are conserved during a chemical reaction?</p> <p>Friday: How do solutions relate to concentration?</p>
Standards:	<ul style="list-style-type: none"> SPS2. Obtain, evaluate, and communicate information to explain how atoms bond to form stable compounds.

	<ul style="list-style-type: none"> ○ a. Analyze and interpret data to predict properties of ionic and covalent compounds. (Clarification statement: Properties are limited to types of bonds formed, elemental composition, melting point, boiling point, and conductivity.) ● SPS3. Obtain, evaluate, and communicate information to support the Law of Conservation of Matter. <ul style="list-style-type: none"> ○ a. Plan and carry out investigations to generate evidence supporting the claim that mass is conserved during a chemical reaction (Clarification statement: Limited to synthesis, decomposition, single replacement, double replacement reactions). ○ b. Develop and use a model of a chemical equation to illustrate how the total number of atoms is conserved during a chemical reaction. (Clarification statement: Limited to chemical equations that include binary ionic and covalent compounds and will not include equations containing polyatomic ions.) 				
Success Criteria:	<p>Monday: No school!</p> <p>Tuesday: I can determine which type of equation is occurring and I can balance it as needed.</p> <p>Wednesday: I can determine which type of equation is occurring and I can balance it as needed.</p> <p>Thursday: I can balance equations, name compounds, and write their formulas.</p> <p>Friday: I can predict how solutions relate to concentration.</p>				
	Monday	Tuesday	Wednesday	Thursday	Friday
Bellringer	NO SCHOOL!	21 DSP	22 DSP	23 DSP	24 DSP
Opening (Strategies)		Review of balancing equations	Final questions about Unit 4 before NB Test	Questions about Unit 4 before Test	Review Salt and Sugar PHET from last unit, dissociation, what happened to the particles. Demo?
Transition to Work Session		Review instructions	Give instructions for notebook test	Test instructions	Concentrations PhET Overview
WICOR strategy (Strategies)		W-Writing C-Collaboration	O- Organization	R- Reading	i-Inquiry
Work Session		Unit 4 Review Practice Work Quizizz	Unit 4 NB Test Study Guide Review	Unit 4 Test Part A Unit 4 Test Part B	PHET: Concentration - Solutions Saturation Molarity Questions: Solution Phet Questions
Personalization/ Differentiation		Students may work at their own pace and collaborate with peers.			
Summary/ Assessment		TOTD: Point of Confusion	TOTD: Google Form	Test Reflection	Go over questions together as a class

(Strategies)					
Homework (optional)		Unit 4 Study Guide		Study Guide Due	
Additional Resources for students & parents					

Week 4

January 27-31

EQ's	<p>Monday: How does solution relate to concentration?</p> <p>Tuesday: What factors affect the rate of dissolving?</p> <p>Wednesday: What information can solubility curves tell us about a solution?</p> <p>Thursday: What is the difference between saturated and unsaturated?</p> <p>Friday: What can a pH scale tell us?</p>				
Standards:	<ul style="list-style-type: none"> ● SPS6. Obtain, evaluate, and communicate information to explain the properties of solutions. <ul style="list-style-type: none"> ○ a. Develop and use models to explain the properties (solute/solvent, conductivity, and concentration) of solutions. ○ b. Plan and carry out investigations to determine how temperature, surface area, and agitation affect the rate solutes dissolve in a specific solvent. ○ c. Analyze and interpret data from a solubility curve to determine the effect of temperature on solubility. ○ d. Obtain and communicate information to explain the relationship between the structure and properties (e.g., pH, and color change in the presence of an indicator) of acids and bases. (Clarification statement: Limited to only the structure of simple acids and bases (e.g., HCl and NaOH) that demonstrates the presence of an H⁺ or OH⁻.) ○ e. Plan and carry out investigations to detect patterns in order to classify common household substances as acidic, basic, or neutral. 				
Success Criteria:	<p>Monday: I can predict how solutions relate to concentration.</p> <p>Tuesday: I can describe what factors affect the rate of dissolving.</p> <p>Wednesday: I can distinguish between saturated, unsaturated, and supersaturated solutions.</p> <p>Thursday: I can use a solubility curve to describe information about solutions.</p> <p>Friday: I can tell where acids and bases are on the pH scale.</p>				
	Monday	Tuesday	Wednesday	Thursday	Friday
Bellringer	27 DSP	28 DSP	29 DSP	30 DSP	31 DSP
Opening (Strategies)	Review Salt and Sugar PHET from last unit, dissociation, what	Elements, compounds and mixtures - be sure to discuss the mixtures	Have you ever had diluted kool aid? What happened? What about SUPER	Whole class discussion about solubility curves before being given	I see, I think, I wonder about a pH scale

	happened to the particles. Demo?	section with students to remind them of homogeneous and heterogeneous terms.	concentrated kool aid? How did this happen? Lemonade/Koolaid example	practice work.	
Transition to Work Session	Reading annotation instructions Two column Notes	Students will set up for the dissolving lab in their interactive notebook	I see, I think, I wonder about a solubility curve As a class, go over what a solubility curve tells us and what saturated, super-saturated and unsaturated means.	Solubility Curve practice work instructions	Notes on ECM in their notebooks
WICOR strategy (Strategies)	R-Reading	I-Inquiry	O-Organization	W-Writing	I-Inquiry
Work Session	Solutions Phet Elements, Compounds, Mixtures Reading USA Test Prep	Data collection for dissolving lab and analysis questions Solutions POST	Add these definitions to a TIP chart in their interactive notebooks Simple practice work with solubility curves	Practice work with solubility curves	Weekly Quiz Students will brainstorm a list of 10 substances and list whether they think they're acids or bases
Personalization/ Differentiation	Due to finishing the test last week, students will be working on two different assignments based on what they completed last week.				
Summary/ Assessment (Strategies)	Discuss PhET Simulation questions	Analysis Questions	TOTD: If you wanted to supersaturate something, would you want to have warm, room temperature or cold water and why?	TOTD: Google Form	
Homework (optional)	Week 4 HW				Study Guide handed out
Additional Resources for					

students & parents					
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Week 5

February 3–7

EQ's	<p>Monday: What is the difference between an acid and a base?</p> <p>Tuesday: What is the difference between an acid and a base?</p> <p>Wednesday: How can we analyze and interpret data to find patterns that exist in different types of solutions?</p> <p>Thursday: How can we analyze and interpret data to find patterns that exist in different types of solutions?</p> <p>Friday: How can we analyze and interpret data to find patterns that exist in different types of solutions?</p>				
Standards:	<ul style="list-style-type: none"> • SPS6. Obtain, evaluate, and communicate information to explain the properties of solutions. <ul style="list-style-type: none"> ○ a. Develop and use models to explain the properties (solute/solvent, conductivity, and concentration) of solutions. ○ b. Plan and carry out investigations to determine how temperature, surface area, and agitation affect the rate solutes dissolve in a specific solvent. ○ c. Analyze and interpret data from a solubility curve to determine the effect of temperature on solubility. ○ d. Obtain and communicate information to explain the relationship between the structure and properties (e.g., pH, and color change in the presence of an indicator) of acids and bases. (Clarification statement: Limited to only the structure of simple acids and bases (e.g., HCl and NaOH) that demonstrates the presence of an H⁺ or OH⁻.) ○ e. Plan and carry out investigations to detect patterns in order to classify common household substances as acidic, basic, or neutral. 				
Success Criteria:	<p>Monday: I can describe which pH levels represent acids and bases.</p> <p>Tuesday: I can use information about acids and bases to discuss their properties.</p> <p>Wednesday: I can use data to find patterns that exist in different types of solutions.</p> <p>Thursday: I can use data to find patterns that exist in different types of solutions.</p> <p>Friday: I can use data to find patterns that exist in different types of solutions.</p>				
	Monday	Tuesday	Wednesday	Thursday	Friday
Bellringer	3 DSP	4 DSP	5 DSP	6 DSP	7 DSP
Opening (Strategies)	<p>I see, I think, I wonder about a pH scale</p> <p>Directions for lab: Students will make observations about</p>	Mystery substances guesses	Acids vs. Bases on an aluminum can-- what do you think will happen?	Any last minute questions about Unit 5 before Notebook Test	Questions about Unit 5 before Test

	materials and initial guesses of what they are.				
Transition to Work Session	Then test the mystery materials with pH strips and observe what happens. Students will then compare their findings to the pH scale that is listed on their litmus paper tubes and decide which substances would be considered acidic and which ones would be considered basic or alkali.	Instructions for mini research project	Review activity instructions Study Guide Review	Directions for Notebook Test	Test instructions
WICOR strategy (Strategies)					R- Reading
Work Session	Students will share properties of the substances that were identified as acids and bases. What did all of the acids have in common? What did all of the bases have in common? Students can then copy a chart into their notebooks to show the similarities and differences between acids and bases.	Mini research project: Students will take their 10 solutions and decide what their pH level is, whether it is an acid or a base and include a picture of each substance.	Unit 5 Review task cards	Completion of Notebook Test Unit 5 Review	Unit 5 Test Part A Unit 5 Test Part B
Personalization/ Differentiation					
Summary/ Assessment (Strategies)	Students will try to classify each substance as an acid or base	TOTD: Acid/Base check in	Review over previous day's TOTD	Any last minute questions about Unit 5, Notebook Test, and preview that we will be starting Electricity and Magnetism Unit the	Test Reflection

				following day	
Homework (optional)	Unit 5 Study Guide				Study Guide Due
Additional Resources for students & parents					

Week 6

February 10–14

EQ's	Monday: What is a circuit? Tuesday: What is a circuit? Wednesday: How can an electric circuit induce a magnetic field? Thursday: How can an electric circuit induce a magnetic field? Friday: How can a magnet induce an electric current?				
Standards:	<ul style="list-style-type: none"> SPS10. Obtain, evaluate, and communicate information to explain the properties and relationships between electricity and magnetism. <ul style="list-style-type: none"> a. Use mathematical and computational thinking to support a claim regarding relationship among voltage, current, and resistance. b. Develop and use models to illustrate and explain the conventional flow (direct and alternating) of current and the flow of electrons in simple series and parallel circuits. (<i>Clarification statement:</i> Advantages and disadvantages of series and parallel circuits should be addressed.) c. Plan and carry out investigations to determine the relationship between magnetism and the movement of electrical charge. (<i>Clarification statement:</i> Investigations could include electromagnets, simple motors, and generators.) SPS7. Obtain, evaluate, and communicate information to explain transformations and flow of energy within a system. <ul style="list-style-type: none"> a. Construct explanations for energy transformations within a system. (<i>Clarification statement:</i> Types of energy to be addressed include chemical, mechanical, electromagnetic, light, sound, thermal, electrical, and nuclear.) 				
Success Criteria:	Monday: I can state the components of a circuit. Tuesday: I can state the components of a circuit. Wednesday: I can describe what an electromagnet is. Thursday: I can explain the difference between an electromagnet and a permanent magnet. Friday: I can explain how a magnet can induce an electric field.				
	Monday	Tuesday	Wednesday	Thursday	Friday
Bellringer	10	11 Cedar Field Trip	12	13	14

	DSP	DSP	DSP	DSP	DSP
Opening (Strategies)	Review of Test		Directions for lab: Students will be given materials for lab and will be given a brief overview about what the lab will consist of.	Recap of electromagnets lab	Discussion of Electromagnetic induction, EM v permanent magnet
Transition to Work Session	Instructions about finishing test and moving forward to Circuits PhET		Students will set up NB for Lab	Annotation Instructions	Quiz and PhET instructions
WICOR strategy (Strategies)	I-Inquiry (phet)		I-Inquiry	R-Reading W-Writing	I-Inquiry
Work Session	Finish Unit 5 Test Circuits PhET activity	Review of previous material Quizizz, Quizlet, Gimkit	Electromagnet Lab	Electromagnets Reading 2-column notes	Weekly Quiz Faraday's Law PhET
Personalization/ Differentiation					
Summary/ Assessment (Strategies)	Students will include drawings and definitions from the phet in their notebooks	Questions about previous units	Analysis Questions	TOTD: Google Form	Questions about PhET
Homework (optional)	Week 6 Homework				
Additional Resources for students & parents					

Week 7
February 17-21

EQ's	Monday: Building Professional Learning Day Tuesday: What are the parts of a circuit? Wednesday: How does a parallel circuit differ from a series circuit? Thursday: CEDAR COUNSELORS IN CLASS Friday: How are voltage, current, and resistance related?				
Standards:	<ul style="list-style-type: none"> SPS10. Obtain, evaluate, and communicate information to explain the properties and relationships between electricity and magnetism. <ul style="list-style-type: none"> a. Use mathematical and computational thinking to support a claim regarding relationship among voltage, current, and resistance. b. Develop and use models to illustrate and explain the conventional flow (direct and alternating) of current and the flow of electrons in simple series and parallel circuits. (<i>Clarification statement:</i> Advantages and disadvantages of series and parallel circuits should be addressed.) c. Plan and carry out investigations to determine the relationship between magnetism and the movement of electrical charge. (<i>Clarification statement:</i> Investigations could include electromagnets, simple motors, and generators.) SPS7. Obtain, evaluate, and communicate information to explain transformations and flow of energy within a system. <ul style="list-style-type: none"> a. Construct explanations for energy transformations within a system. (<i>Clarification statement:</i> Types of energy to be addressed include chemical, mechanical, electromagnetic, light, sound, thermal, electrical, and nuclear.) 				
Success Criteria:	Monday: Building Professional Learning Day Tuesday: I can describe the necessary components of a circuit. Wednesday: I can describe the pros and cons of series and parallel circuits. Thursday: CEDAR COUNSELORS IN CLASS Friday: I can explain what current, voltage, and resistance are.				
	Monday	Tuesday	Wednesday	Thursday	Friday
Bellringer	Building Professional Learning Day!	18 DSP	19 DSP	20 DSP Cedar Counselors will be helping students pick their electives for the entire class period	21 DSP
Opening (Strategies)		Static Electricity Demos	Christmas Lights Series and Parallel Circuits Description		Blown transformer picture
Transition to Work Session		Set up for Circuits Lab	AC/DC BrainPop		Voltage, current, and resistance relationship notes
WICOR strategy (Strategies)		I - Inquiry			
Work Session		Circuits Lab -basic circuit	Circuits Practice Work		Ohm's Law Practice Work

		-circuit with two bulbs, where when you unscrew one, the other goes off -circuit above, but with brighter bulbs -circuit above, but where one bulb is brighter than the other -circuit with two bulbs where when you unscrew one, the other stays on - any of the above with three bulbs	Electromagnetic Induction Review		
Personalization/ Differentiation					
Summary/ Assessment (Strategies)		Analysis Questions	TOTD: Google Form		Weekly Quiz
Homework (optional)		Week 7 Homework			Unit 6 Study Guide given out
Additional Resources for students & parents					

Week 8

February 24-28

EQ's	Monday: How are voltage, current, and resistance related? Tuesday: How are electricity and magnetism related? Wednesday: How are electricity and magnetism related? Thursday: How are electricity and magnetism related? Friday: What are models and how are they useful in science?
Standards:	<ul style="list-style-type: none"> SPS10. Obtain, evaluate, and communicate information to explain the properties and relationships between electricity and magnetism.

	<ul style="list-style-type: none"> ○ a. Use mathematical and computational thinking to support a claim regarding relationship among voltage, current, and resistance. ○ b. Develop and use models to illustrate and explain the conventional flow (direct and alternating) of current and the flow of electrons in simple series and parallel circuits. (<i>Clarification statement:</i> Advantages and disadvantages of series and parallel circuits should be addressed.) ○ c. Plan and carry out investigations to determine the relationship between magnetism and the movement of electrical charge. (<i>Clarification statement:</i> Investigations could include electromagnets, simple motors, and generators.) ● SPS7. Obtain, evaluate, and communicate information to explain transformations and flow of energy within a system. <ul style="list-style-type: none"> ○ a. Construct explanations for energy transformations within a system. (<i>Clarification statement:</i> Types of energy to be addressed include chemical, mechanical, electromagnetic, light, sound, thermal, electrical, and nuclear.) 				
Success Criteria:	<p>Monday: I can explain what current, voltage, and resistance are.</p> <p>Tuesday: I can give an example about how electricity and magnetism are related.</p> <p>Wednesday: I can give an example about how electricity and magnetism are related.</p> <p>Thursday: I can give an example about how electricity and magnetism are related.</p> <p>Friday: I can state the components of a complete scientific model.</p>				
	Monday	Tuesday	Wednesday	Thursday	Friday
Bellringer	24 DSP	25 DSP	26 DSP	27 DSP	28 DSP
Opening (Strategies)	Amount of current in series and parallel circuits	Draw series and parallel circuits	Any last minute questions about Unit 6 before Notebook Test	Questions about Unit 6 before Test	Apple in the Dark Poll the class and get out possible misconceptions amongst the group--what questions do we need to answer?
Transition to Work Session	Ohm's Law Review	Task Card Instructions	Directions for Notebook Test	Test instructions	Reminders of what to include in a good model.
WICOR strategy (Strategies)	Reading and Writing			R- Reading	C- Collaboration
Work Session	Choice Board: Practice with current, resistance, and voltage relationships Students will be asked to complete at least 10 out of the 20 questions on the choice board, but will be able to choose which ones to	Task Card Review Questions	Completion of Notebook Test Unit 6 Review	Unit 6 Test Part A Unit 6 Test Part B	Mystery box and models--individual models to show how it works and what is happening.

	complete.				
Personalization/ Differentiation	Review over practice problems				
Summary/ Assessment (Strategies)	TOTD: Point of Confusion	Go over task cards	Any last minute questions about Unit 6.	Test Reflection	Group share of models--what to change or add or take away?
Homework (optional)	Study Guide and Makeup/Review Packet		Makeup/Review Packet Due	Study Guide Due	
Additional Resources for students & parents					

Week 9

March 2-6

EQ's	<p>Monday: How can I model waves? What is a wave?</p> <p>Tuesday: What are the types of waves? How do they compare and contrast?</p> <p>Wednesday: How does light behave when interacting with matter?</p> <p>Thursday: Parent-Teacher Conferences: No students!</p> <p>Friday: NO SCHOOL!</p>
Standards:	<ul style="list-style-type: none"> SPS9. Obtain, evaluate, and communicate information to explain the properties of waves. <ul style="list-style-type: none"> a. Analyze and interpret data to identify the relationships among wavelength, frequency, and energy in electromagnetic waves and amplitude and energy in mechanical waves b. Ask questions to compare and contrast the characteristics of electromagnetic and mechanical waves. c. Develop models based on experimental evidence that illustrate the phenomena of reflection, refraction, interference, and diffraction. d. Analyze and interpret data to explain how different media affect the speed of sound and light waves e. Develop and use models to explain the changes in sound waves associated with the Doppler Effect SPS7. Obtain, evaluate and communicate information to explain transformations and flow of energy within a system. <ul style="list-style-type: none"> a. Construct explanations for energy transformations within a system. (Clarification statement: Types of energy to be addressed include chemical, mechanical, electromagnetic, light, sound, thermal, electrical, and nuclear.
Success Criteria:	<p>Monday: I can predict how light moves in waves.</p> <p>Tuesday: I can state the 4 different types of waves.</p> <p>Wednesday: I can explain the 5 different types of light behavior.</p> <p>Thursday: No students</p>

	Friday:NO SCHOOL!				
	Monday	Tuesday	Wednesday	Thursday	Friday
Bellringer	2 DSP	3 DSP	4 ½ <i>day with students</i> DSP	No students- Parent- Teacher Conferences	NO School!
Opening (Strategies)	Apple in the Dark Poll the class and get out possible misconceptions amongst the group--what questions do we need to answer?	Review of light boxes	Set up for Lab		
Transition to Work Session	Reminders of what to include in a good model.	Wave Brainpop	Light behavior lab		
WICOR strategy (Strategies)	C- Collaboration	W-Writing	I-Inquiry		
Work Session	Mystery box and models- individual models to show how it works and what is happening.	Students will complete notes based on video over wave types and parts	POST for light behavior		
Personalization/ Differentiation					
Summary/ Assessment (Strategies)	Group share of models--what to change or add or take away?	Time permitting: Students will complete a quizlet live to practice with the new vocabulary.	Share out of observations		
Homework (optional)	No HW due to short week	No HW due to short week	No HW due to short week		
Additional Resources for students & parents					