Grade Level 8	<u>Teacher/Room</u> : Christina Scales/ 149 Week of: April 25, 2016
Unit Vocabulary	
Milestone Review	
Monday 4-25-16	

### CC Standard

### S8P4. Students will explore the wave nature of sound and electromagnetic radiation.

- a. Identify the characteristics of electromagnetic and mechanical waves.
- b. Describe how the behavior of light waves is manipulated causing reflection, refraction diffraction, and absorption.
  - c. Explain how the human eye sees objects and colors in terms of wavelengths.
  - d. Describe how the behavior of waves is affected by medium (such as air, water, solids).
  - e. Relate the properties of sound to everyday experiences.
- f. Diagram the parts of the wave and explain how the parts are affected by changes in amplitude and pitch.

	Science	STEM	
Instructional Strategies/ Resources Used:	Instructional game/peer collaboration	Instructional game/peer collaboration	
Learning Target	I can explain the characteristics of electromagnetic and mechanical waves.	I can explain the characteristics of electromagnetic and mechanical waves.	
Activating:	Mechanical and EM Waves http://www.bing.com/videos/search? q=mechanical+and+em+waves+video &adlt=strict&qpvt=mechanical+and+e m+waves+video&view=detail∣=CC 43AE8DD4957F7453BECC43AE8DD495 7F7453BE&FORM=VRDGAR	Mechanical and EM Waves http://www.bing.com/videos/searc h?q=mechanical+and+em+waves+v ideo&adlt=strict&qpvt=mechanical +and+em+waves+video&view=deta il∣=CC43AE8DD4957F7453BEC C43AE8DD4957F7453BE&FORM=V RDGAR	
Class Activity:	<ol> <li>Review power point         Milestone Review         Questions</li> <li>Construct 3 Waves Cootie         Catchers.</li> <li>Students will then play         game with a partner.</li> </ol>	1. Review power point Milestone Review Questions 2. Construct 3 Waves Cootie Catchers. 3. will then play game with a partner	

Assessment	Observation of student answers	Observation of student answers	
	during game	during game	
Homework:			
Differentiation:	Peer groups		

### **Tuesday** 4/26/16 (Milestone Testing in Morning)

### CC Standard

### S8P4. Students will explore the wave nature of sound and electromagnetic radiation.

- a. Identify the characteristics of electromagnetic and mechanical waves.
- b. Describe how the behavior of light waves is manipulated causing reflection, refraction diffraction, and absorption.
  - c. Explain how the human eye sees objects and colors in terms of wavelengths.
  - d. Describe how the behavior of waves is affected by medium (such as air, water, solids).
  - e. Relate the properties of sound to everyday experiences.
- f. Diagram the parts of the wave and explain how the parts are affected by changes in amplitude and pitch.

	Science 1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> Block	Stem 4 <sup>th</sup> Block	
Instructional Strategies/ Resources Used:	Instructional Games/make a model	Instructional Games/making a model	
Learning Target	I can identify the different forms of energy.	I can identify the different forms of energy.	
Different types of energy	EM Waves <a href="https://www.youtube.com/watch?v=" wnkb8iy-k04"="">https://www.youtube.com/watch?v=</a> <a href="https://www.youtube.com/watch?v=" wnkb8iy-k04"="">wnkb8IY-k04</a>	EM Waves https://www.youtube.com/watch?v= WNkB8IY-k04	
Class Activity	Review Powerpoint     Milestone Questions     Play Around the     Room Trivia Question     Game to review     waves	Review Powerpoint     Milestone Questions     Play Around the     Room Trivia Question     Game to review     waves	
Homework:			
Differentiation:	Peer partners		

### Wednesday 4/27/16 (Milestone Testing in Morning)

#### **CC Standard**

## S8P5. Students will recognize characteristics of gravity, electricity, and magnetism as major kinds of forces acting in nature.

- a. Recognize that every object exerts gravitational force on every other object and that the force exerted depends on how much mass the objects have and how far apart they are.
- b. Demonstrate the advantages and disadvantages of series and parallel circuits and how they transfer energy.
  - c. Investigate and explain that electric currents and magnets can exert force on each other.

	Science 1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> , Block Stem 4 <sup>th</sup> Block			
Instructional Strategies/ Resources Used:	Instructional game/peer collaboration	Instructional game/peer collaboration		
Learning Target	I can explain current and magnets	I can explain currents and magnets		
Activating:	Parallel and Series Circuit  http://www.bing.com/videos/search ?q=parrallel+and+series+circuits+vid eo&view=detail∣=E054860ED07 4160CF8CAE054860ED074160CF8CA &FORM=VIRE	?q=parrallel+and+series+circuits+vid eo&view=detail∣=E054860ED07		
Class Activity:	Review Powerpoint     Milestone Questions     Play Around the Room     Trivia Question Game to     review waves	Review Powerpoint     Milestone Questions     Play Around the Room     Trivia Question Game to     review waves		
Assessment:	Trivia answers	Trivia Answers		
Homework:				
Differentiation:				

### Thursday 4/28/16 (Milestone Testing in Morning)

### **CC** Standard

## S8P5. Students will recognize characteristics of gravity, electricity, and magnetism as major kinds of forces acting in nature.

a. Recognize that every object exerts gravitational force on every other object and that the force exerted depends on how much mass the objects have and how far apart they are.

Science 1 <sup>st,</sup> 2 <sup>nd</sup> , 3 <sup>rd</sup> Block	Stem 4 <sup>th</sup> Block

Instructional Strategies/ Resources	Student technology	Student technology	
Used:			
Learning Target	I can demonstrate an understanding of electric circuits and magnetism.	I can demonstrate an understanding of electric circuits and magnetism.	
Activating:			
Class Activity:	1. Ipads—Study Island	1. Ipads—Study Island	
Assessment:	Study Island results	Study Island results	
Homework:			
Differentiation:			

Friday 4/29/16 (Milestone Testing in Morning)

# S8CS1. Students will explore the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works.

- a. Understand the importance of—and keep—honest, clear, and accurate records in science.
- b. Understand that hypotheses can be valuable even if they turn out not to be completely accurate.

# S8CS3. Students will have the computation and estimation skills necessary for analyzing data and following scientific explanations.

- a. Analyze scientific data by using, interpreting, and comparing numbers in several equivalent forms, such as integers, fractions, decimals, and percents.
  - b. Find the mean, median, and mode and use them to analyze a set of scientific data.
- c. Apply the metric system to scientific investigations that include metric to metric conversions (i.e., centimeters to meters).
  - d. Decide what degree of precision is adequate, and round off appropriately.
  - e. Address the relationship between accuracy and precision.
  - f. Use ratios and proportions, including constant rates, in appropriate problems.

	Science 1 <sup>st</sup> Block	Stem 4 <sup>th</sup> Block	
Instructional Strategies/ Resources Used:	exploration/art/group work/technology	Direct instruction/art/group work	
Learning Target	I can collect data and display it.	I can collect data and display it.	
Activating:	Hatching Ducks <a href="http://www.bing.com/videos/search">http://www.bing.com/videos/search</a> <a href="mailto:?q=care+of+ducklings+video&amp;view=d">?q=care+of+ducklings+video&amp;view=d</a> <a href="mailto:etail&amp;mid=EB321477CB264AC39F73&amp;FORM=VIRE">etail∣=EB321477CB264AC39F73&amp;FORM=VIRE</a> <a href="mailto:B321477CB264AC39F73&amp;FORM=VIRE">B321477CB264AC39F73&amp;FORM=VIRE</a>	Hatching Ducks <a href="http://www.bing.com/videos/search?gecare+of+ducklings+video&amp;view=detail&amp;mid=EB321477CB264AC39F73EB">http://www.bing.com/videos/search?gecare+of+ducklings+video&amp;view=detail∣=EB321477CB264AC39F73&amp;FORM=VIRE</a> 321477CB264AC39F73&FORM=VIRE	

Class Activity:		duce our project on	<mark>1.</mark>	Introduce our project
	ducks		_	on ducks.
		n a cover for a data	2.	Design a cover for a
	bookl	et,		data booklet,
	3. Creat	e calendar to	<mark>3.</mark>	Create calendar to
	moni	tor days to eggs		monitor days to eggs
	hatch			hatch.
	<mark>4. W</mark> eig	h and candle eggs	4.	Weigh and candle
	and lo	og data results.		eggs and log data
	5. Using	internet,		results.
	inves <sup>-</sup>	tigate the breed of		
	ducks	that match the		
	eggs.			
Assessment:	Data collection book		Data Collection	book
Homework:				
Differentiation:				