

LONG BRANCH PUBLIC SCHOOLS

Pacing Guide - 7th Grade

Marking Period 1

Day	Unit	Topic	Desired Outcomes	NGSS	ELA Common Core Standards					
					Reading	Writing	S & L	Math	21st Century	Technology
Opening Day 1			Rules, Procedures, Syllabus							
Opening Day 2			Safety							
1	Unit 1	Formation of the earth	Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.	ESS2-1	RST.6-8.1, RST.6-8.7, RST.6-8.9	WHST.6.8.2, WHST.6-8.8	SL.8.5	MP.2, 6.NS.C.5, 6.EE.B.6, 7.EE.B.4	9.1	8.1 & 8.2
2										
3										
4										
5										
6										
7	Summative Unit Assessment & Introduction to Green School Project 1			ESS2						
8	Unit 2	Plate Tech	Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions.	ESS2-3	RST.6-8.1, RST.6-8.7, RST.6-8.9	WHST.6.8.2, WHST.6-8.8	SL.8.5	MP.2, 6.NS.C.5, 6.EE.B.6, 7.EE.B.4	9.1	8.1 & 8.2
9										
10										
11										
12										
13										
14	Summative Unit Assessment			ESS2						
15	Unit 3	Weather and Rotation of Earth	Collect data to provide evidence for how the motions and complex interactions of air masses results in changes in weather conditions.	ESS2-5	RST.6-8.1, RST.6-8.7, RST.6-8.9	WHST.6.8.2, WHST.6-8.8	SL.8.5	MP.2, 6.NS.C.5, 6.EE.B.6, 7.EE.B.4	9.1	8.1 & 8.2
16										
17										
18										
19										
20										
21	Summative Unit Assessment & Completion of Green School Project 1			ESS2						

Marking Period 2

Day	Unit	Topic	Desired Outcome	NGSS	ELA Common Core Standards					
					Reading	Writing	S & L	Math	21st Century	Technology
1	Unit 4	Motion	Apply Newton's Third Law to design a solution to a problem involving the motion of two colliding objects.*	PS2-1	RST.6-8.1, RST.6-8.3	WHST.6.8.2, WHST.6-8.7	SL.8.5	MP.2, 6.NS.C.5, 6.EE.A.2, 7.EE.B.3, 7.EE.B.4	9.1	8.1 & 8.2
2										
3										
4										
5										
6	Summative Unit Assessment & Introduction to Green School Project 2			PS2						
7	Unit 5	Speed and Energy	Construct and interpret graphical displays of data to describe the relationships of kinetic energy to the mass of an object and to the speed of an object.	PS3-1	RST.6-8.1, RST.6-8.3	WHST.6.8.2, WHST.6-8.7	SL.8.5	MP.2, 6.RP.A.1, 6.RP.A.2, 7.RP.A.2, 8.EE.A.1, 8.EE.A.2, 8.F.A.3, 8.SP.2,5	9.1	8.1 & 8.2
8										
9										
10										
11										
12										
13	Summative Unit Assessment			PS3						
14	Unit 6	Heat Transfer	Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer.	PS3-3	RST.6-8.1, RST.6-8.3	WHST.6.8.2, WHST.6-8.7	SL.8.5	6.RP.A.1, 6.RP.A.2, 7.RP.A.2, 8.EE.A.1, 8.EE.A.2, 8.F.A.3, 8.SP.2,5	9.1	8.1 & 8.2
15										
16										
17										
18										
19	Summative Unit Assessment & Completion of Green School Project 2			PS3						
20	Review for Midpoint Assessment									
21	Midpoint Assessment									
22	Midpoint Assessment									

Marking Period 3			ELA Common Core Standards							
Day	Unit	Topic	Desired Outcomes	NGSS	Reading	Writing	S & L	Math	21st Century	Technology
1	Unit 7	Elements, Compounds, Mixtures and Solutions	Develop models to describe the atomic composition of simple molecules and extended structures.	PS1-1	RST.6-8.1, RST.6-8.3, RST.6-8.7	WHST.6.8.7, WHST.6-8.8	SL.8.5	MP.2, MP.4, 6.RP.A.3, 6.NS.C.5, 8.EE.A.3, 6.SP.B.5	9.1	8.1 & 8.2
2			Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.	PS1-2						
3										
4										
5	Summative Unit Assessment & Introduction to Green School Project 3			PS1						
6	Unit 8	States of matter and energy	Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed.	PS1-3	RST.6-8.1, RST.6-8.3, RST.6-8.7	WHST.6.8.7, WHST.6-8.8	SL.8.5	MP.2, MP.4, 6.RP.A.3, 6.NS.C.5, 8.EE.A.3, 6.SP.B.5	9.1	8.1 & 8.2
7			Gather and make sense of information to describe that synthetic materials come from natural resources and impact society.	PS1-4						
8										
9										
10	Summative Unit Assessment			PS1						
11	Unit 9	Molecules vs Cells	Conduct an investigation to provide evidence that living things are made of cells; either one cell or many different numbers and types of cells.	LS1-1	RST.6-8.1, RST.6-8.2, RI 6.8	WHST.6.8.1, WHST.6-8.2, WHST.6.8.7, WHST.6-8.8, WHST.6.8.9	SL.8.5	6.EE.C.9, 6.SP.A.2, 6.SP.B.4	9.1	8.1 & 8.2
12			Develop and use a model to describe the function of a cell as a whole and ways parts of cells contribute to the function	LS1-2						
13										
14										
15	Summative Unit Assessment & Completion of Green School Project 3			LS1						
16	Various State Testing on Various Day in Marking Period 3									
17										
18										

Marking Period 4			ELA Common Core Standards							
Day	Unit	Topic	Desired Outcomes	NGSS	Reading	Writing	S & L	Math	21st Century	Technology
1	Unit 10	Body systems	Use argument supported by evidence for how the body is a system of interacting subsystems composed of	LS1-3	RST.6-8.1, RST.6-8.2, RI 6.8	WHST.6.8.1, WHST.6-8.2, WHST.6.8.7, WHST.6-8.8, WHST.6.8.9	SL.8.5	6.EE.C.9, 6.SP.A.2, 6.SP.B.4	9.1	8.1 & 8.2
2			Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of	LS1-4						
3			Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.	LS1-5						
4										
5	Summative Unit Assessment & Introduction to Green School Project 4			LS1						
6	Unit 11	Genetics 1	Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories.	LS1-8	RST.6-8.1, RST.6-8.4, RST.6-8.7	WHST.6.8.1, WHST.6-8.4, WHST.6.8.7	SL.8.5	MP.4, 6.SP.8.5	9.1	8.1 & 8.2
7			Develop and use a model to describe why structural changes to genes (mutations) located on chromosomes may affect proteins and may result in harmful, beneficial, or neutral effects to the structure and function of the organism	LS3-1						
8										
9										
10	Summative Unit Assessment			LS3						
11	Unit 12	Genetics 2	Develop and use a model to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variation.	LS3-2	RST.6-8.1, RST.6-8.7, RST.6-8.9	WHST.6.8.2, WHST.6-8.8, WHST.6.8.9	SL.8.1, SL.8.4	MP.4, 6.RP.A.a, 6.SP.B.5, 6.EE.B.6, 7.RP.A.2	9.1	8.1 & 8.2
12			Gather and synthesize information about the technologies that have changed the way humans influence the inheritance of desired traits in organisms.	LS4-5						
13			Use mathematical representations to support explanations of how natural selection may lead to increases and decreases of specific traits in populations over time.	LS4-6						
14										
15	Summative Unit Assessment & Completion of Green School Project 4			LS4						
16	Review for Final									
17										
18	Final									
19										
20										
21										
22										
23										