Biology Pacing Calendar

	Week 1	Week 2	Week 3	Week 4
September	**Assessments** **Welcome and Overview** **Intro to Models** **Reading diagrams/charts** **Graph Interpretation** **Anchor Phenomenon Launch**	**Structure and Function** **Marathon Runner - Unit 1** ***Gas Exchange and Cellular Respiration*** MS-LS1-3: Interacting Body Systems HS-LS1-2: Interacting Body Systems HS-LS1-3: Feedback Mechanisms and Homeostasis HS-LS1-7: Cellular Respiration and Energy Transfer	**Structure and Function** **Marathon Runner - Unit 1** ***Muscles & Energy*** MS-LS1-3: Interacting Body Systems HS-LS1-2: Interacting Body Systems HS-LS1-3: Feedback Mechanisms and Homeostasis HS-LS1-7: Cellular Respiration and Energy Transfer	**Structure and Function** **Marathon Runner - Unit 1** ***Human Thermoregulation*** MS-LS1-3: Interacting Body Systems HS-LS1-2: Interacting Body Systems HS-LS1-3: Feedback Mechanisms and Homeostasis **Science Benchmark**

Biology Pacing Calendar

	Week 1	Week 2	Week 3	Week 4
October	**Structure and Function** **Marathon Runner - Unit 1** ***Water Balance*** MS-LS1-3: Interacting Body Systems HS-LS1-2: Interacting Body Systems HS-LS1-3: Feedback Mechanisms and Homeostasis	**Structure and Function** **Marathon Runner - Unit 1** ***Unit Closing*** **Final Performance Task** **Review All Standards** **Regents/Cluster Review** **Assessment**	**Matter and Energy in Organisms and Ecosystems** **Food for All – Unit 5** ***1.Anchor Phenomenon Launch (2 days)*** ***2.Neolithic Revolution (3 days)*** MS-LS2-1: Effects of Resource Availability HS-LS2-1: Carrying Capacity of Ecosystems	**Matter and Energy in Organisms and Ecosystems** **Food for All – Unit 5** ***The Superfood that Changed the World*** HS-LS1-5: Photosynthesis and Energy Transformation HS-LS2-4: Biomass and Trophic Levels **STEAM PROJECTS**

Biology Pacing Calendar

	Week 1	Week 2	Week 3	Week 4
November	**Matter and Energy in Organisms and Ecosystems** **Food for All – Unit 5** ***Infectious Agent or Insufficient Diet*** MS-LS2-3: Matter Cycling and Energy Flow in Ecosystems HS-LS2-3: Aerobic and Anaerobic Cycling of Matter **STEAM PROJECTS**	**Matter and Energy in Organisms and Ecosystems** **Food for All – Unit 5** ***Food for Plants*** HS-LS1-6: Formation of Carbon-Based Molecules **STEAM PROJECT** **STEAM Night** **November 13, 2025**	**Matter and Energy in Organisms and Ecosystems** **Food for All – Unit 5** ***Unit Closing*** **Final Performance Task** **Review All Standards** **Regents/Cluster Review** **Assessment** **Assessment – Mock Regents** **November 25, 2025**	**Interdependent Relationships in Ecosystems** **Wolly Mammoth – Unit 6** ***1.Anchor Phenomenon Launch (1 days)*** ***2.Tuskless Elephants (4 days)*** HS-LS4-6 Human Impact on Biodiversity Solution HS-LS2-7: Human Impact Reduction Solution
December	**Interdependent Relationships in Ecosystems** **Wolly Mammoth – Unit 6**	**Interdependent Relationships in Ecosystems** **Wolly Mammoth – Unit 6**	**Interdependent Relationships in Ecosystems**	**Interdependent Relationships in Ecosystems** Holiday Recess

Biology Pacing Calendar

	Week 1	Week 2	Week 3	Week 4
	Coral Bleaching MS-LS2-5: Biodiversity and Ecosystem Services Solutions HS-LS2-2 Biodiversity and Populations in Ecosystems HS-LS2-5 Cycling of Carbon in Ecosystems	***Kelp Forest*** MS-LS2-5: Biodiversity and Ecosystem Services Solutions HS-LS2-2 Biodiversity and Populations in Ecosystems HS-LS2-6: Ecosystem Dynamics, Functioning, and Resilience	**Wolly Mammoth – Unit 6** ***Passenger Pigeon*** HS-LS2-8: Social Interactions and Group Behavior HS-LS4-2 Four Factors of Natural Selection HS-LS4-6: Human Impact on Biodiversity Solution	School Closed **Holiday Assignment -** Final Performance Task HS-LS2-6: Ecosystem Dynamics, Functioning, and Resilience HS-LS2-7: Human Impact Reduction Solution
January	Holiday Recess School Closed **Holiday Assignment -**	**Interdependent Relationships in Ecosystems** **Wooly Mammoth – Unit 6**	**Growth, Development, and Reproduction**	**Growth, Development, and Reproduction**

Biology Pacing Calendar

	Week 1	Week 2	Week 3	Week 4
	Final Performance Task	***Unit Closing*** Cluster/Regents Review Assessment	**Saving the Mountain Lion – Unit 4** ***1.Anchor Phenomenon Launch (1 days)*** ***2.Populations (4 days)*** HS-LS1-4: Cellular Division and Differentiation HS-LS3-2: Inheritable Genetic Variation HS-LS1-8: Human Reproduction* HS-LS4-3: Adaptation of Populations HSLS3-3: Variation and Distribution of Traits	**Saving the Mountain Lion – Unit 4** ***Sexual Reproduction*** HS-LS1-8: Human Reproduction HS-LS3-1: Chromosomal Inheritance
February	**Inheritance and Variation of Traits**	**Inheritance and Variation of Traits**	**Inheritance and Variation of Traits** **Saving the Mountain Lion – Unit 4**	**1) Growth, Development, and Reproduction**

Biology Pacing Calendar

	Week 1	Week 2	Week 3	Week 4
	Saving the Mountain Lion – Unit 4 ***Genetic Variation*** HS-LS1-4: Cellular Division and Differentiation HS-LS4-3: Adaptation of Populations HS-LS3-2: Inheritable Genetic Variation	**Saving the Mountain Lion – Unit 4** **Engineering Gene Flow** HS-LS3-2: Inheritable Genetic Variation HSLS3-3: Variation and Distribution of Traits HS-LS4-3: Adaptation of Populations	Winter Recess School Closed Holiday Assignment - Final Performance Task	**2) Inheritance and Variation of Traits** **Saving the Mountain Lion – Unit 4** ***Unit Closing*** Cluster/Regents Review Assessment
	Natural Selection and Evolution	**Natural Selection and Evolution**	**Natural Selection and Evolution**	

Biology Pacing Calendar

	Week 1	Week 2	Week 3	Week 4
March	**Humans versus Bacteria – Unit 2** ***1.Anchor Phenomenon Launch (1 days)*** ***2.The Black Death (4 days)*** MS-LS4-6: Adaptation of Populations over Time HS-LS4-3: Adaptation of Populations MS-LS4-4: Natural Selection HS-LS4-2: Four Factors of Natural Selection HS-LS4-4: Natural Selection Leads to Adaptation **STEAM PROJECTS**	**Humans versus Bacteria – Unit 2** ***1.The Black Death (1 day – if needed)*** **2.Antibiotic Resistance (4 days)** HS-LS4-3: Adaptation of Populations HS-LS4-4: Natural Selection Leads to Adaptation HS-LS4-2: Four Factors of Natural Selection HS-LS4-5: Environmental Change - Speciation and Extinction **STEAM PROJECTS** **STEAM Night** **March 19, 2025**	**Humans versus Bacteria – Unit 2** ***The Microbiome*** HS-LS4-4: Natural Selection Leads to Adaptation HS-LS4-5: Environmental Change - Speciation and Extinction	**Natural Selection and Evolution** **Humans versus Bacteria – Unit 2** ***Cooperation and Survival*** HS-LS2-8: Social Interactions and Group Behavior

Biology Pacing Calendar

	Week 1	Week 2	Week 3	Week 4
April	**Natural Selection and Evolution** **Humans versus Bacteria–Unit 2** ***Unit Closing*** Cluster/Regents Review Assessment **EARTH DAY PROJECTS**	**Natural Selection and Evolution** **Humans versus Bacteria–Unit 2** Spring Recess School Closed Holiday Assignment - 1. Final Performance Task 2.Earth Day Projects	**Earth's Systems** **Independent** **HS-ESS2-6** **EARTH DAY PROJECTS** **Earth Day – April 22, 2026**	**Earth's Systems** **Independent** ***Unit Closing*** Cluster/Regents Review Assessment

Biology Pacing Calendar

	Week 1	Week 2	Week 3	Week 4
May	**Engineering Design** **Evolution of Sick Humans -Unit 3** ***1.Lactase Persistence*** ***2.Leptin Resistance*** HS. LS1-1: Genes, Proteins, and Tissues HS-LS3-1: Chromosomal Inheritance	**Engineering Design** **Evolution of Sick Humans -Unit 3** ***1.Circadian Rhythms*** ***2.Common Ancestry*** ***3.Unit Closing*** Cluster/Regents Review Assessment HS.LS1-1: Genes, Proteins, and Tissues HS-LS3-1: Chromosomal Inheritance MS-LS4-3: Embryological Evidence of Common Ancestry HS-LS4-1: Evidence of Common Ancestry and Diversity HS-ETS1-2: Optimizing the Design Solution HS-ETS1-3: Developing Possible Solutions **STEAM PROJECTS** **STEAM Night** **May 14, 2025**	**Regents Review**	**Regents Review**

Biology Pacing Calendar

	Week 1	Week 2	Week 3	Week 4
June	**Regents Review**	**Regents Review**	**Biology Regents** June 18, 2026 @ 9:15 a.m.	

Biology Pacing Calendar

Biology:

UNIT 1: **Marathon Runner**	UNIT 2: **Humans vs. Bacteria**	UNIT 3: **Evolution of Sick Humans**	UNIT 4: **Saving the Mountain Lion**	UNIT 5: **Food for All**	UNIT 6: **Woolly Mammoth**
TOPIC: Homeostasis and Feedback Mechanisms in Humans	**TOPIC:** Natural Selection and the Interdependence of Organisms	**TOPIC:** Genetics, Protein Synthesis, and the Mismatch Hypothesis	**TOPIC:** Reproduction and Genetic Variation	**TOPIC:** Energy and Matter in Ecosystems	**TOPIC:** Ecosystem Resilience, Climate Change, and Human Impact
PES: HS-LS1-2 HS-LS1-3 HS-LS1-7	**PES:** HS-LS2-8 HS-LS4-2 HS-LS4-3 HS-LS4-4 HS-LS4-5	**PES:** HS-LS1-1 HS-LS3-1 HS-LS4-1 HS-ETS1-2 HS-ETS1-3	**PES:** HS-LS1-4 HS-LS3-2 HS-LS3-3 HS-LS1-8 (NYSSLS only) HS-LS4-3	**PES:** HS-LS1-5 HS-LS1-6 HS-LS2-3 HS-LS2-4 HS-LS2-1	**PES:** HS-LS2-5 HS-LS2-2 HS-LS2-6 HS-LS2-7 HS-LS4-6 (NGSS, not in the NYSSLS)
✔ Field Tested Fall, '18	✔ Field Tested Spring, '19	✔ Field Tested Spring, '22	⚒ Field Testing Spring, '23	⚒ Field Testing Spring, '23	✔ Field Tested Spring, '18