Crest Memorial School Curriculum and Pacing Guide

All activities correspond with marking period essential questions. Activity goes with question as do the the corresponding standards, modifications, accommodations, assessments and 21st century learning skills.

Grade: 8

Subject: Science

Adoption Date:

Revision Date: March 2022

	MP1	MP2	MP3	MP4
Pacing Guide	What are Newton's Laws of Motion? (2 weeks) Why do we have tides? (1 week) Why do some things sink and others float? (4 weeks) What is the Law of Conservation of Energy? (3 weeks)	What's inside a cell? (3 weeks) How do cells reproduce? (3 weeks) How are traits passed down from parent to child? (3 weeks)	What are the properties of waves? (4 weeks) How do we sense waves? (4 weeks) How do waves interact? (3 weeks)	What constitutes useful scientific evidence? (2 weeks) How can a conclusion be best justified and explained to others? (2 weeks)
Instructional Materials	Teacher created textbook BrainPop	Teacher created textbook BrainPop	Teacher created textbook BrainPop	Teacher created textbook BrainPop
Activities	Demonstrate Newton's laws of motion	Make and observe a slide of plant cells	Identify and measure the characteristics of waves	Collect and identify evidence

	Create a tide chart Design and test a boat Measure the heat capacity of a metal	Identify the stages of the cell cycle Draw and interpret Punnett squares	Describe process of hearing and seeing waves Combine sound waves to create interference	Analyze forensic evidence Write a conclusion based on evidence
Standards	PS2.A: Forces and Motion PS2.B: Types of Interactions PS3.A: Definitions of Energy PS3.B: Conservation of Energy and Energy Transfer PS3.C: Relationship Between Energy and Forces ETS1.A: Defining and Delimiting an Engineering Problem ETS1.B: Developing Possible Solutions ETS1.C: Optimizing the Design Solution	LS1.A: Structure and Function LS1.B: Growth and Development of Organisms LS3.A: Inheritance of Traits LS3.B: Variation of Traits LS4.A: Evidence of Common Ancestry and Diversity LS4.B: Natural Selection LS4.C: Adaptation LS4.D: Biodiversity and Humans ETS1.A: Defining and Delimiting an Engineering Problem ETS1.B: Developing Possible Solutions ETS1.C: Optimizing the Design Solution	PS4.A: Wave Properties PS4.B: Electromagnetic Radiation PS4.C: Information Technologies and Instrumentation LS1.D: Information Processing ETS1.A: Defining and Delimiting an Engineering Problem ETS1.B: Developing Possible Solutions ETS1.C: Optimizing the Design Solution	ETS1.A: Defining and Delimiting an Engineering Problem ETS1.B: Developing Possible Solutions ETS1.C: Optimizing the Design Solution
Accommodations and Modifications	English language learners: Work with English speaking partner / group, use translation program for vocab as needed At Risk of School Failure: Work in cooperative group, adjust time for completion Gifted and Talented Students: Give opportunities to teach other students, produce work	English language learners: Work with English speaking partner / group, use translation program for vocab as needed At Risk of School Failure: Work in cooperative group, adjust time for completion Gifted and Talented Students: Give opportunities to teach other students, produce work	English language learners: Work with English speaking partner / group, use translation program for vocab as needed At Risk of School Failure: Work in cooperative group, adjust time for completion Gifted and Talented Students: Give opportunities to teach other students, produce work	English language learners: Work with English speaking partner / group, use translation program for vocab as needed At Risk of School Failure: Work in cooperative group, adjust time for completion Gifted and Talented Students: Give opportunities to teach other students, produce work

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Interdisciplinary Connections	Math EE: Expressions and Equations F: Functions SP: Statistics and Probability ELA RI: Reading Informational Text RST: Reading in Science and Technical Subjects WHST: Writing in History, Science, and Technical Subjects	Math EE: Expressions and Equations F: Functions SP: Statistics and Probability ELA RI: Reading Informational Text RST: Reading in Science and Technical Subjects WHST: Writing in History, Science, and Technical Subjects	Math EE: Expressions and Equations F: Functions SP: Statistics and Probability ELA RI: Reading Informational Text RST: Reading in Science and Technical Subjects WHST: Writing in History, Science, and Technical Subjects	Math EE: Expressions and Equations F: Functions SP: Statistics and Probability ELA RI: Reading Informational Text RST: Reading in Science and Technical Subjects WHST: Writing in History, Science, and Technical Subjects
Assessments	**Benchmark Assessments** Standardized Tests **Ongoing Formative Assessment** Lab Reports Homework Class Participation **Summative Assessments** Chapter and Unit Tests	**Benchmark Assessments** Standardized Tests **Ongoing Formative Assessment** Lab Reports Homework Class Participation **Summative Assessments** Chapter and Unit Tests	**Benchmark Assessments** Standardized Tests **Ongoing Formative Assessment** Lab Reports Homework Class Participation **Summative Assessments** Chapter and Unit Tests	**Benchmark Assessments** Standardized Tests **Ongoing Formative Assessment** Lab Reports Homework Class Participation **Summative Assessments** Chapter and Unit Tests
21st Century Themes and Skills	Identify the factors affecting the period of a pendulum (CRP8 Critical Thinking and Problem Solving) Measure the buoyancy of boats (CRP8 Critical	Draw and interpret Punnet squares (CRP8 Critical Thinking and Problem Solving) Discuss examples of selective breeding and genetic	Measure the focal length of a lens (CRP8 Critical Thinking and Problem Solving) Make & measure waves (CRP8 Critical Thinking and Problem Solving)	Use forensics to solve a crime (CRP8 Critical Thinking & Problem Solving)

	Thinking and Problem Solving)	engineering (CRP9 Accountability, Productivity, and Ethics)		