

Grade 8- Assured Experiences

Note:

- Online curriculum guide under revision. For guidance. Refer to State Standards- GLC's, GLE's and CMT expected performances on Connecticut State Department of Education Website.

Marking Period 1. - Scientific Investigation/ Motion and Forces

Activity	Resource	Suggestions	Portfolio product
1. Where is the safety equipment in your school, Classroom?	United Streaming video), CSDE website, Prentice Hall Physical Science Text: Pages 17-20.	This should include the following: Lab safety contract, identifying lab equipment, science safety rules, and safety symbols.	Design a Poster illustrating one of the safety rules in Appendix A of textbook page 799. Relevant safety symbols and clear directions (any ADDITIONAL illustrations if necessary) must be included.
2. Conduct a Controlled Experiment: Designing a Paper Airplane.	Physical Science Lab Manual – Pages 3-5 All-In-One Teaching resources Unit1 chapters1-8 Pages 77- 80	Distance instead of time Explore different aerodynamic shapes. Ex: The flying squirrel, The bald eagle etc.	Student Report
3. Students Design an Experiment	Science Fair Research and proposal	Give students Science Fair Time Line	Student data collected for Science Fair project
4. Density Lab. Include Mass, Volume and Irregular Volume	Physical Science Lab Manual- Pages 6-7 All-In-One Teaching resources Unit 1 chapters 1-8 Page 103 Pages 119-120		Student report
5. Graphing Motion Activity	All-In-One Teaching resources Unit 2 chapters9-14 Pages 53-56(Guided Reading and Study)		Student report
6. Inclined To Roll	Prentice Hall Physical Science Text: Pages 318-319.		Student report

All-In-One Teaching resources Unit2 chapters9-14
Pages 59-61

Marking Period 2. - Motion and forces

Continue/conclude Science Fair Projects

Activity	Resource	Suggestions	Portfolio product
1.Math Practice: Calculate (power, speed, distance, time, force, work, efficiency ,Mechanical Advantage)	Prentice Hall Physical Science Text: Pages 408-411; 416-418	See AE Gr8 resource for worksheets.	Student work
2. Discovery Activity: Is it a machine?	Prentice Hall Physical Science Text: Page 412		Student Work
3. Analyzing Data: Mechanical Advantage	Prentice Hall Physical Science Text: Page 417		
4. Seesaw Science	Prentice Hall Physical Science Text: Page 420 All-In-One Teaching resources Unit 2, Page 253	See AE Gr8 resource for basic version of the lab	Student Work
5. Try This Activity: Paper Screw	Prentice Hall Physical Science Text: Page425	Examine a soda cap (optional) Skills Lab: Angling for Access	Student Work relating to Activity.
6. Tie It Together: Design, Construct and Test bridges. Specifically, Beam, Truss and suspension Bridges.	Prentice Hall Physical Science Text: Pages 500-507		1. Math Activity Page 507 Of Text Book. 2. Student designed Bridge with description.
7. Embedded Task: Shipping And Sliding	CSDE website		

Marking Period 3 - Properties Of Elements, Chemical Building Blocks

Activity	Resource	Suggestions	Portfolio product
1. Tie It Together: Design, Construct and Test bridges. Specifically, Beam, Truss and suspension Bridges.	Prentice Hall Physical Science Text: Pages 500-507 United Streaming	Math Activity Page 507 Of Text Book.	Student designed Bridge with description.
2. What is a mixture	Textbook page 34		Student work
3. Filtering a Mixture			Student Lab report
4. Exploring Solid, Liquid, Gas			Student drawing or model
5. Autobiography of an element	Rubric posted on Website - AE Gr8 resource		Student report

Marking Period 4

Chemical interactions & Applied Science

Activity	Resource	Suggestions	Portfolio product
1. Alien Periodic Table	Lab Manual Pages 26-28 All-In-One Teaching resources Unit1 chapters1-8 pages 263-265		Completed Periodic table and questions
2. Identifying unknown powders using chemical properties	Mystery Powder (web resource)	See AE Gr8 resource on District website	Student Report
3. Mostly Cloudy	Textbook Page.189 Making Lime water		Paragraph supporting their conclusion using evidence from lab

Applied Science (select any 2 of the activities below)

Applied Activity: Making Glue	All-In-One Teaching resources Unit1 chapters1-8 Page 126		Completed Worksheet
Applied Activity: Making a Chair	Textbook Page 5	Use Newspaper & masking tape versus cardboard or display boards from science fair	Procedure & diagram of the chair
Applied Activity: Design & build a roller coaster	Textbook Page 441 All-In-One Teaching resources Unit2 chapters 9-14 page 298-300	Use foam pipe insulation cut in half length wise instead of the tubing	Diagram of the design of the roller coaster Calculate the average speed of the roller coaster
Applied Activity: Build your own thermometer	Text book Page 478		Student completed worksheet

