



Unit Title:	Matter and Its Interactions
Unit Vocabulary:	<p>atomic mass • conserve • mass • particle • state</p> <p>acceleration • conversion • deceleration • elastic collision • energy transfer • inelastic collision • inertia • kinetic energy • linear • magnitude • motion energy • non-linear • potential energy • proportional • ratio • square root • stationary • vector • velocity</p>
Upcoming Important Dates: (Tests, Quizzes, Projects)	Wednesday (10/16) - Unit 1 Matter Posttest

	Standard + Learning Target	Activating Strategy (Opening)	Teaching/Instructional Strategies (Work Time) *Differentiation/Modifications, Student Assessment, Rigor, How Will STUDENTS SWRL*	Formative or Summative Assessment	Summarizing Activity (Closing)	AVID Strategy
T U E	<p>Standard (# AND fully written out): 7-PS1-5 Develop and use a model to describe how the total number of atoms does not change in a chemical reaction and thus mass is conserved.</p> <p>Learning Target (what/how): I can apply what I've learned in Unit 1 to respond to the study guide questions in preparation for tomorrow's assessment</p>	<p>Find your pair: SW be given one half of a chemical equation and will walk around the room to find the rest of their equation</p>	<p>Final test review</p> <ol style="list-style-type: none"> Find your pair Study guide Review Jeopardy <p>Content/Academic Vocabulary: chemical reaction, reactants, products, atoms, molecules, balanced, law of conservation of matter, chemical change, physical change, atoms, molecules</p> <p>ILAP/IEP/504 Scaffolds & Supports: visual models, peer buddy</p> <p>Opportunities to SWRL: reading chemical equations, speaking to peers to find matching equation, reading study guide questions, writing study guide responses, listening to other groups' responses, reading and listening to Jeopardy questions, speaking with group about answers, sharing out jeopardy responses</p> <p>Costa's Levels of Thinking/Questioning:</p>	<p>Informal Formative - Students will be assessed informally in two ways. The first will be their responses to the questions from the study guide. The second will be their performance on the review Jeopardy</p>	<p>Are you Ready? - Students will rate their preparedness for tomorrow's assessment using a 1-10 scale. 1 being not ready at all and 10 being more than ready. Students will choose the number that best represents them and explain why they chose it</p>	<p>Find your pair, review games</p>

			<p>Level 1: What does the Law of Conservation of Mass state about the total number of atoms in a chemical reaction?</p> <p>Level 2: In the chemical reaction below, identify how the total number of atoms of each element stays the same before and after the reaction. $2\text{H}_2 + \text{O}_2 \rightarrow 2\text{H}_2\text{O}$</p> <p>Level 3: Explain how you could create a model of a chemical reaction to demonstrate that mass is conserved. What specific steps would you take to show that the total number of atoms remains the same before and after the reaction?</p>			
W E D	<p>Standard (# AND fully written out): <u>7-PS1-5 Develop and use a model to describe</u> how the total number of atoms does not change in a chemical reaction and thus mass is conserved.</p> <p>Learning Target (what/how): I can demonstrate my knowledge of Unit 1 by scoring an 80% or higher on the final unit test.</p>	<p>Reflection Before Test</p> <ul style="list-style-type: none"> - Students will fill this out prior to the assessment to give me insight into how they have prepared individually for the assessment 	<p><u>Final Unit 1 TEST</u></p> <ol style="list-style-type: none"> 1. Reflection Before Test 2. Unit 1 Matter Posttest Part 2 3. Reflection After Test <p>Planned Costas (DOK) Questioning: - Varying levels of DOK questions embedded in the assessment</p>	<p>Formal Summative</p> <ul style="list-style-type: none"> - Students will be formally assessed by completing an 18 question MasteryConnect assessment. The assessment will help us to evaluate what went well in the unit and what did not 	<p>Reflection After Test</p> <ul style="list-style-type: none"> - Students will fill this out after completing the assessment to give me insight into how they felt about their performance on the assessment 	<p>Reflection Before and After Test</p>
T H U	<p>Standard (# AND fully written out): <u>7-PS3-1 Construct and interpret graphical displays of data to describe</u> the proportional relationships of kinetic energy to the mass of an object and to the speed of an object.</p> <p>Learning Target (what/how): I can explain how energy is used to operate (use) a</p>	<p>Brain dump: SW write down everything they can think of about batteries, using the guiding questions to prompt their thoughts</p>	<p>MATH BENCHMARK (even day)</p> <p>Flashlight lab</p> <ol style="list-style-type: none"> 1. Brain dump - batteries 2. uInvestigate Lab- Making a flashlight shine Lab <ol style="list-style-type: none"> a. Printable response sheet 3. \$2 summary <p>Early Finishers: Balancing Chemical Equations Flocabulary</p> <p>Content/Academic Vocabulary: energy, chemical energy, electricity, thermal energy, light energy,</p>	<p>Informal formative - students will be informally assessed based on their responses to the lab questions</p>	<p>\$2 summary: each word in response is 10 cents, the response must equal \$2</p> <p>Prompt: Summarize what you've learned about the energy in a flashlight. Use at least 4 of the words below:</p> <ul style="list-style-type: none"> - battery - chemical - transform - electricity - light - heat 	<p>Interactive lab, \$2 summary</p>

	<p>flashlight by participating in the lab and answering the questions</p>		<p>procedure, electrical energy, transform</p> <p>ILAP/IEP/504 Scaffolds & Supports: visual models, peer buddy, word bank, physical models</p> <p>Opportunities to SWRL: writing about batteries, reading procedure, writing lab responses, speaking to partner</p> <p>Costa's Levels of Thinking/Questioning: Level 1: What is kinetic energy? Level 2: How does increasing the speed of an object affect its kinetic energy? Use an example to explain your answer. Level 3: Given a data set of different objects with varying masses and speeds, construct a graph that shows the relationship between mass, speed, and kinetic energy. What patterns do you observe, and how can you explain the proportional relationships between mass, speed, and kinetic energy?</p>			
<p>F R I</p>	<p>Standard (# AND fully written out): 7-PS3-1 Construct and interpret graphical displays of data to describe the proportional relationships of kinetic energy to the mass of an object and to the speed of an object.</p> <p>Learning Target (what/how): I can brainstorm ideas for my water bottle rocket project by completing the planning phase questions with my group</p>	<p>Think-Pair-Share - Think: Imagine you are riding a bike. You start pedaling slowly, and then you start to go faster and faster. How does the speed of the bike change how hard it is to stop? What happens if you are carrying a backpack—does that make it easier or harder to stop the bike?</p> <p>Pair: Now, turn to a partner and discuss your thoughts. Do you both agree on how speed and the weight (mass) of the backpack affect stopping the bike?</p>	<p>Unit 2 pre-test</p> <ol style="list-style-type: none"> 1. Think-Pair-Share 2. Unit 2 pre-test 3. Water Bottle Rocket (Intro) 4. Group planning phase <p>Planned Costas (DOK) Questioning: - Varying levels of DOK questions embedded in the assessment</p>	<p>Informal Formative - Students will be informally assessed on their preexisting knowledge of kinetic energy. We will use student responses in the think-pair-share activity to gain a better understanding of what students already know</p>	<p>3-2-1 - Write 3 things you learned in class this week, 2 new words, and 1 thing you still have a question about</p>	<p>3-2-1, STEM project</p>

		<p>Why do you think that happens?</p> <p>Share: Be ready to share your ideas with the class. How do you think the speed and the weight (mass) of an object, like a bike or a backpack, might affect how much energy it has? How could we use a graph to show this?</p>				
--	--	---	--	--	--	--