

Name: Reynolds, Moon		Grading Quarter: 2	Week Beginning: Week 8 12/2/24-12/6/24
School Year: 2024-2025		Subject: Science	
Monday	Notes: <b>Grade 4</b> <b>Unit 1:</b> Forces and Energy <b>Lesson 3:</b> Energy Transfer in Collisions <b>Essential Question:</b> How does energy transfer when objects collide?	Objective: <ul style="list-style-type: none"> <li>Students will ask questions and construct an explanation to describe the transfer of energy when objects collide.</li> </ul> Lesson Overview: <ul style="list-style-type: none"> <li>Access Prior Knowledge <ul style="list-style-type: none"> <li>Page 41- Page Keely Science Probe: <i>Toy Car Crash</i> <ul style="list-style-type: none"> <li>Three friends were playing with their toy cars. Betty crashed her car into Alonso's car. They each had different ideas about what was transferred during the crash.</li> <li>Students write their guess as to which friend had the right explanation and why.</li> </ul> </li> </ul> </li> <li>Engage <ul style="list-style-type: none"> <li>Pages 42-43- Encounter the Phenomenon: How does the motion of cars change when they collide? <ul style="list-style-type: none"> <li>Video: <i>Rear-End Collision</i></li> <li>Sample questions for page 43: <ul style="list-style-type: none"> <li>Why did the cars crash?</li> <li>Where did the cars' energy go when they crashed?</li> <li>How can you stay safe in car crashes?</li> </ul> </li> </ul> </li> </ul> </li> </ul>	Academic Standards: <b>5.P3U1.4</b> Obtain, analyze, and communicate evidence of the effects that balanced and unbalanced forces have on the motion of objects. <b>5.P3U2.5</b> Define problems and design solutions pertaining to force and motion. <b>5.P4U1.6</b> Analyze and interpret data to determine how and where energy is transferred when objects move.
	Tuesday	Notes: <b>Grade 4</b> <b>Unit 1:</b> Forces and Energy <b>Lesson 3:</b> Energy Transfer in Collisions <b>Essential Question:</b> How does energy transfer when objects collide?	Objective: <ul style="list-style-type: none"> <li>Students will ask questions and construct an explanation to describe the transfer of energy when objects collide.</li> </ul> Lesson Overview: <ul style="list-style-type: none"> <li>Explain <ul style="list-style-type: none"> <li>Page 48- Inertia in Collisions <ul style="list-style-type: none"> <li>Academic Vocabulary: <ul style="list-style-type: none"> <li><u>Collision</u>- occurs when two or more objects hit each other with a force.</li> </ul> </li> </ul> </li> <li>Page 49- Momentum in Collisions <ul style="list-style-type: none"> <li>Academic Vocabulary: <ul style="list-style-type: none"> <li><u>Momentum</u>- the strength or force something has when it is moving.</li> </ul> </li> <li>Why is it important to wear a seat belt when you are in a moving vehicle?</li> </ul> </li> </ul> </li> </ul>

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Wednesday</p>	<p>Notes:  <b>Grade 4</b>  <b>Unit 1:</b>  Forces and Energy  <b>Lesson 3:</b>  Energy Transfer in Collisions  <b>Essential Question:</b>  How does energy transfer when objects collide?</p>	<p>Objective:</p> <ul style="list-style-type: none"> <li>• Students will ask questions and construct an explanation to describe the transfer of energy when objects collide.</li> </ul> <p>Lesson Overview:</p> <ul style="list-style-type: none"> <li>• Explain <ul style="list-style-type: none"> <li>○ Pages 50-51- Close Reading: Energy Transfers in Collisions</li> <li>○ Page 52- Conservation of Energy</li> </ul> </li> </ul>	<p>Academic Standards:  <b>5.P3U1.4</b>  Obtain, analyze, and communicate evidence of the effects that balanced and unbalanced forces have on the motion of objects.  <b>5.P3U2.5</b>  Define problems and design solutions pertaining to force and motion.  <b>5.P4U1.6</b>  Analyze and interpret data to determine how and where energy is transferred when objects move.</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Thursday</p>	<p>Notes:  <b>Grade 4</b>  <b>Unit 1:</b>  Forces and Energy  <b>Lesson 3:</b>  Energy Transfer in Collisions  <b>Essential Question:</b>  How does energy transfer when objects collide?</p>	<p>Objective:</p> <ul style="list-style-type: none"> <li>• Students will ask questions and construct an explanation to describe the transfer of energy when objects collide.</li> </ul> <p>Lesson Overview:</p> <ul style="list-style-type: none"> <li>• Explore <ul style="list-style-type: none"> <li>○ Pages 44-46- Inquiry Activity: Explore Toy Car Crashes <ul style="list-style-type: none"> <li>▪ Materials:</li> <li>▪ Make a Prediction</li> <li>▪ Carry Out an Investigation</li> <li>▪ Communicate Information</li> </ul> </li> </ul> </li> </ul>	<p>Academic Standards:  <b>5.P3U1.4</b>  Obtain, analyze, and communicate evidence of the effects that balanced and unbalanced forces have on the motion of objects.  <b>5.P3U2.5</b>  Define problems and design solutions pertaining to force and motion.  <b>5.P4U1.6</b>  Analyze and interpret data to determine how and where energy is transferred when objects move.</p>

Friday	<p>Notes:</p> <p><b>Grade 4</b></p> <p><b>Unit 1:</b> Forces and Energy</p> <p><b>Lesson 3:</b> Energy Transfer in Collisions</p> <p><b>Essential Question:</b> How does energy transfer when objects collide?</p>	<p>Objective:</p> <ul style="list-style-type: none"> <li>• Students will ask questions and construct an explanation to describe the transfer of energy when objects collide.</li> </ul> <p>Lesson Overview:</p> <ul style="list-style-type: none"> <li>• Elaborate <ul style="list-style-type: none"> <li>○ Page 56- Crash!</li> <li>○ Page 57- STEM Career Connection</li> </ul> </li> </ul>	<p>Academic Standards:</p> <p><b>5.P3U1.4</b> Obtain, analyze, and communicate evidence of the effects that balanced and unbalanced forces have on the motion of objects.</p> <p><b>5.P3U2.5</b> Define problems and design solutions pertaining to force and motion.</p> <p><b>5.P4U1.6</b> Analyze and interpret data to determine how and where energy is transferred when objects move.</p>
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