Name:			Grading Quarter:		Week Beginning: Week 6		
Reynolds, Moon		2	11/18/24-11/22/24				
School Year: 2024-2025		Subject: Science					
Monday	Notes: Grade 4 Unit 1: Forces and Energy Lesson 2: Speed and Energy Essential Question: How are speed and energy related?	betwee  Lesson Overviev  Explore	n speed and energy.	ation about the relationship	Academic Standards: 5.P3U1.4 Obtain, analyze, and communicate evidence of the effects that balanced and unbalanced forces have on the motion of objects. 5.P3U2.5 Define problems and design solutions pertaining to force and motion. 5.P4U1.6 Analyze and interpret data to determine how and where energy is transferred when objects move.		
Tuesday	Notes: Grade 4 Unit 1: Forces and Energy Lesson 2: Speed and Energy Essential Question: How are speed and energy related?	betwee	n speed and energy.  v: Prior Knowledge Page 23- Page Keeley Scie Page 25- Encounter the P the speed of race cars?  Video: Race Cars Sample Question How does How does What ma	ence Probe: Amusement Park henomenon: What determines s: s the car move so fast? s the driver stop? kes the car go? a race car driver?	Academic Standards: 5.P3U1.4 Obtain, analyze, and communicate evidence of the effects that balanced and unbalanced forces have on the motion of objects. 5.P3U2.5 Define problems and design solutions pertaining to force and motion. 5.P4U1.6 Analyze and interpret data to determine how and where energy is transferred when objects move.		

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	Notes:	Objective:	Academic
	Grade 4	Students will construct an explanation about the relationship	Standards:
	Unit 1:	between speed and energy.	5.P3U1.4
Wednesday	Forces and Energy Lesson 2: Speed and Energy Essential Question: How are speed and energy related?	Lesson Overview:  • Explain  • Pages 30-31- Energy and Motion  • Academic Vocabulary:  • Energy- the ability to do work.  • Potential Energy- energy that is stored inside an object (stored energy).  • Kinetic Energy- the energy an object has because it is moving (energy of motion).  • Students read and answer the following questions:  • What happens to the potential energy of an object when it is raised higher?  • How are energy of motion and speed related?	Obtain, analyze, and communicate evidence of the effects that balanced and unbalanced forces have on the motion of objects.  5.P3U2.5 Define problems and design solutions pertaining to force and motion.  5.P4U1.6 Analyze and interpret data to determine how and where energy is transferred when objects move.
	Notes:	Objective:	Academic
	Grade 4	Students will construct an explanation about the relationship	Standards:
	Unit 1:	between speed and energy.	5.P3U1.4
	Forces and Energy	,	Obtain, analyze, and
	Lesson 2:	Lesson Overview:	communicate
	Speed and Energy	Explain	evidence of the effects that balanced
	Essential	o Pages 32-33- Energy and Speed	and unbalanced
$\vdash$	Question:	<ul> <li>Label a Diagram: Speed and Energy of a Roller</li> </ul>	forces have on the
hu	How are speed and	Coaster	motion of objects.
rsc	energy related?	Write captions for the parts of a roller	5.P3U2.5
Thursday		coaster ride.	Define problems and design solutions
		<ul> <li>Describe the speed, potential energy,</li> </ul>	pertaining to force
		and kinetic energy at each point on the	and motion.
		roller coaster track.	5.P4U1.6
		<ul> <li>Engineering Connection</li> </ul>	Analyze and interpret data to
		How do mechanical engineers make	determine how and
		roller coasters go faster?	where energy is transferred when
			objects move.

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	Notes:	Objective:	Academic
	Grade 4	<ul> <li>Students will construct an explanation about the relationship</li> </ul>	Standards:
	Unit 1:	between speed and energy.	5.P3U1.4
	Forces and Energy	,	Obtain, analyze, and
	Lesson 2:	Lesson Overview:	communicate
	Speed and Energy	Elaborate	evidence of the
	Essential	Page 34- STEM Connection: What Does an Automotive	effects that balanced
	Question:	Technician Do?	and unbalanced
	How are speed and	Students will read the article.	forces have on the
Friday	energy related?		motion of objects.
da	chergy related.	■ Talk About It	5.P3U2.5
<		<ul> <li>How might automotive technicians and</li> </ul>	Define problems and
		mechanical engineers work together?	design solutions
			pertaining to force and motion.
			5.P4U1.6
			Analyze and
			interpret data to
			determine how and
			where energy is transferred when
			objects move.
	<u> </u>		objects move.