

## Smith Farm Elementary Lesson Plan

<b>Teacher Name:</b> Edwards	<b>Grade Level:</b> 4th Grade	<b>Subject:</b> Science
<b>Date:</b> May 1-5	<b>Standards:</b> <b>4.P.3.1</b> Recognize the basic forms of energy (light, sound, heat energy, electrical, and magnetic) as the ability to cause motion or create change). <b>4.P.3.2</b> Recognize that light travels in a straight line until it strikes an object or travels from one medium to another, and that light can be reflected, refracted, and absorbed.	

	<b>Monday, May 1</b>	
<b>Standards-aligned Materials and Resources:</b>	<ul style="list-style-type: none"> <li>Forms of Energy interactive notebook</li> </ul>	
<b>Clear Learning Goals (I Can statements):</b>	I can explain the different forms of energy, as well as give examples of each.	
<b>Vocabulary</b>	mechanical energy, sound energy, electrical energy, light energy, thermal energy	
<b>Build Background</b>	<b>Class discussion:</b> Ask students what they remember about the Law of Conservation of Energy from our lessons last week. Make sure to discuss that energy cannot be created or destroyed, but it can change form.	
<b>Direct Instruction (Teacher led)</b>	<p>Remind students that last week, we learned about what energy is and how it exists in a system. In this system of energy, it cannot be created or destroyed, but it can change form. Today we are going to be focusing on five main forms of energy: mechanical, sound, electrical, light, and thermal.</p> <p>In order to learn and record information about each type of energy, we will be completing another interactive notebook page in our science notebooks. Model for students how to cut out and glue this interactive notebook page into their notebooks.</p>	<b>Time:</b> 5 min.
<b>Student Practice</b>	Give each student a copy of the interactive notebook page. Once they have cut it and glued it into their notebook, guide them through filling it in with the different forms of energy. Describe what each form of energy is and see if students can think of examples of each form. Add them to the interactive notebook page as you discuss them.	<b>Time:</b> 15 min.

Check for Understanding	<b>Quick Write:</b> In their science notebooks, students should choose one form of energy and describe it. Then, challenge them to explain how that form of energy can be transformed into another form of energy.	<b>Time:</b> 5 min.
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	<b>Tuesday, May 2</b>	
Standards-aligned Materials and Resources	<ul style="list-style-type: none"> <li>Forms of Energy interactive notebook</li> </ul>	
Clear Learning Goals (I Can statements):	I can explain the different forms of energy, as well as give examples of each.	
Vocabulary	mechanical energy, sound energy, electrical energy, light energy, thermal energy	
Build Background		
Direct Instruction (Teacher led)	*See yesterday's lesson for plans. We will be finishing up the forms of energy interactive notebook since it will more than likely take more than one day.	<b>Time:</b> 5 min.
Student Practice		<b>Time:</b> 15 min.
Check for Understanding		<b>Time:</b> 5 min.

	<b>Wednesday, May 3</b>	
Standards-aligned Materials and Resources	<ul style="list-style-type: none"> <li><a href="#">Forms of Energy Pear Deck</a></li> <li>Chromebooks</li> </ul>	
Clear Learning Goals (I Can statements):	I can describe the different forms of energy, and give examples of energy changing forms.	
Vocabulary	mechanical energy, sound energy, electrical energy, light energy, thermal energy	
Build Background	<b>Quick Write:</b> In their science notebooks, students should choose one form of energy and describe it. Have them share their answers with their classmates when they finish.	

<b>Direct Instruction (Teacher led)</b>	<p>Over the past few days, we have been learning about what energy is, as well as the different types of energy. Before beginning the lesson today, review yesterday's interactive notebook page on the forms of energy.</p> <p>Once you have reviewed the forms of energy, explain to students that today we will be doing a Pear Deck to learn more about the forms of energy and how they can change from one form to another. As we are going through the slides, teachers will be explaining the different forms of energy and guide students in identifying them.</p>	<b>Time: 5 min.</b>
<b>Student Practice</b>	Go through the Pear Deck slides with students, making sure to describe the forms of energy. As we go through the slides, there will be several opportunities for students to answer questions and try to identify the form of energy being shown, as well as identify the energy transformation.	<b>Time: 15 min.</b>
<b>Check for Understanding</b>	At the end of the Pear Deck, there will be several slides where students will have to identify different forms of energy. Teachers should check student responses.	<b>Time: 5 min.</b>

	<b>Thursday, May 4</b>	
<b>Standards-aligned Materials and Resources</b>	<ul style="list-style-type: none"> <li>• "Light Energy" reading and comprehension questions</li> </ul>	
<b>Clear Learning Goals (I Can statements):</b>	I can explain the characteristics of light energy, as well as describe reflection and refraction.	
<b>Vocabulary</b>	light energy, electromagnetic waves, reflection, refraction	
<b>Build Background</b>	<b>Turn and Talk:</b> What is an example of light energy, and where does most light energy on Earth come from? Have students share their thoughts with their table groups and with the class.	
<b>Direct Instruction (Teacher led)</b>	<p>Remind students that over the past few days, we have been learning about the different forms of energy and how they can change from one form to another. Today we are going to focus on light energy and its characteristics.</p> <p>Give each student a "Light Energy" reading. Read the first two paragraphs to them, making sure to point out that most of our light energy comes from the sun.</p>	<b>Time: 5 min.</b>

<b>Student Practice</b>	<p>Students will read the remainder of the passage in their table groups. As they are reading, they should focus on what the speed of light is, electricity, and the difference between reflection and refraction.</p> <p>Once students finish reading, go through the remainder of the text with them and discuss what students learned about light energy.</p>	<b>Time:</b> <b>15 min.</b>
<b>Check for Understanding</b>	Students will answer the comprehension questions on their own. They must go back in the text to find their answers!	<b>Time:</b> <b>5 min.</b>

	<b>Friday, May 5</b>	
<b>Standards-aligned Materials and Resources</b>	<ul style="list-style-type: none"> <li>“Light Energy” reading and comprehension questions</li> </ul>	
<b>Clear Learning Goals (I Can statements):</b>	I can explain the characteristics of light energy, as well as describe reflection and refraction.	
<b>Vocabulary</b>	light energy, electromagnetic waves, reflection, refraction	
<b>Build Background</b>		
<b>Direct Instruction (Teacher led)</b>	*See yesterday’s lesson for plans. We will be finishing up the “Light Energy” reading since it will more than likely take more than one day.	<b>Time:</b> <b>5 min.</b>
<b>Student Practice</b>		<b>Time:</b> <b>15 min.</b>
<b>Check for Understanding</b>		<b>Time:</b> <b>5 min.</b>

**Direct Instruction (Teacher led):** *Examples - Modeling, providing new vocabulary, questioning, anchor charts, scaffolding, chunking content, etc.*

**Student Practice:** *Examples - Small group w/ teacher, pairs, individual; graphic organizers, writing prompts, think-pair-share, student-led discussions, student summaries, pictorial notes, mini-projects, etc.*

**Check for Understanding:** *Examples - ticket out the door, kahoot, white boards, four corners, turn and talk, thumbs up/down, parking lot/Windshield, summative assessment, project, performance, Pear Deck slides, Flipgrid, Padlet, etc.*