

# Unit 4: Energy

What is energy?

9 weeks (35 sessions)

## STAGE 1: DESIRED LEARNING

**Essential Question:** What is energy?

**Essential Understanding:** Students will explore the idea of energy and how energy exists in many forms in our world. They will consider how people get energy from natural resources and the different sources of energy in the world, as well as how people may use energy through electricity or as a fuel source for heating homes, transportation, and other daily uses. Students will also explore sources of energy and classify them as renewable or nonrenewable, based on if the energy's source is able to be replenished or could eventually run out.

Students will consider the impact that different types of energy may have on the environment. Some energy sources may have both positive and negative effects on the environment depending on how they are used. Finally, students will consider how energy use has changed over time and how the ways that people find and use energy sources in the future may continue to change as new technology is developed.

Throughout the unit, students will incorporate academic vocabulary terms related to energy through daily vocabulary exploration that includes key terms related to energy and types of energy to support their understanding of unit content. Students will also dive deeper into noticing elements of words through word study activities that are included within each inquiry. Word study topics include: syllable types, using morphemes to learn about word meanings, Greek roots, prefixes, and suffixes. Students will continue exploring elements of words throughout 4th grade to support their understanding of academic vocabulary and to help them see connections between key terms throughout the year.

## STAGE 3: THE LEARNING PLAN

The Learning Plan in Stage 3 provides a detailed explanation of the work that happens on a daily basis to support the Essential Question, Essential Understandings, and standards outlined in Stage 1. The expectation is that all inquiries are taught in the order that they are written.

### Unit 4 Inquiry Overview

Inquiry #	Inquiry Question	# Sessions
<a href="#"><u>Inquiry 1</u></a>	What is energy? ¿Qué es energía?	4 Sessions
<a href="#"><u>Inquiry 2</u></a>	How do we get energy? ¿Cómo obtenemos energía?	4 Sessions
<a href="#"><u>Inquiry 3</u></a>	How is energy used? ¿Cómo se utiliza la energía?	6 Sessions
<a href="#"><u>Inquiry 4</u></a>	Can we ever run out of energy? ¿Podremos algún día quedarnos sin energía?	6 Sessions
<a href="#"><u>Inquiry 5</u></a>	Is all energy safe? ¿Toda la energía es segura?	4 Sessions
<a href="#"><u>Inquiry 6</u></a>	How does energy use impact the environment? ¿Cómo impacta la energía en el medio ambiente?	4 Sessions
<a href="#"><u>Inquiry 7</u></a>	What is the future of energy? ¿Cuál es el futuro de la energía?	4 Sessions
<a href="#"><u>Inquiry 8</u></a>	What is energy? ¿Qué es energía?	3 Sessions
<b>Total Sessions</b>		<b>35 Sessions</b>