



Engage: Teacher Guide

Sound Energy Module

Use this guide to facilitate a discussion that introduces sound energy.

This teacher support document can be completed in conjunction with the online Engage.

Why Engage?

The purpose of the Engage phase is to provide students with an opportunity to make connections between past and present learning experiences as they access prior knowledge.

In this activity, students will be asked to use their sense of hearing to identify sounds and match them to a specific setting. This animated video illustrates that sounds can be of varying types and volumes and are created when things move. It also demonstrates that sound can be used to identify locations and activities in a specific setting.

Prior Knowledge Questions: Students will use these questions to activate prior knowledge of sound energy as they draw and write responses in the Notebook. Student responses should not be assessed as “right” or “wrong.”

- Pre-activity Notebook question: What are some things that make sound? Draw or type some of them in your notebook, and hit save when you’re done.

Students may type or draw pictures of students playing, electronic games, electronic devices, animals, something being dropped, or a sporting event.

- Post-activity Notebook question: What are some things you can move in order to make sounds? Type out or draw something that you can move to make sound.

Students may type or draw a picture of toys, sporting equipment, piano keys, electronic devices, or everyday objects being pulled, pushed, or dropped.

Follow-up Discussion Questions: Use these discussion questions to facilitate a class conversation about sound energy at the conclusion of the Sound Energy Engage. Each follow-up question has a hint to help students recall information from the animated video. Student responses should not be assessed, only reviewed and discussed.

These follow-up discussion questions can be accessed after completion of the online Engage.

1. What were some of the sounds you recognized that helped you figure out which scene you were listening to? Hint - Think about the different sounds; had you heard any of them before?

Student responses may indicate that they heard birds and water at the lake; beeping, music, and children laughing at the arcade; tapping, voices, and a register at the grocery store; children laughing, a squeaky swing, and the coach’s whistle on the playground; buzzing saws and hammering at the construction site.



2. Why did some things make noise and others did not? Hint - Think about the objects that made noise, were they moving?

Student responses should indicate that in order for something to make sound, it had to move in some way. For example, the coach's whistle made sound because he blew through it, the wheels on the cart squeaked because they were turning, the children made sounds because they were laughing and talking, and the water made sound because it was hitting the shore. The items that did not make sound were not moving.

3. Compare the different sounds you heard. Hint - Do you know any words that describe sounds such as loud, squeaky or soothing?

Students may choose to compare sounds by how they were made. For example, the cart was being pushed, the register was being tapped, the wood was being hammered, the seesaw was going up and down, and the people and birds made sounds by moving air through their mouths.

Students may choose to compare sounds by their quality. For example, the squeaky cart was high pitched, the birds' chirping was soothing, the machine's beeping was loud, the saw was buzzing, the hammer was pounding, the construction vehicles were rumbling, and the water gently lapped.