



Life:Powered

**TYPES OF ENERGY:
A Lesson on
Energy Sources for
Middle School
Students**

TYPES OF ENERGY: A Lesson on Energy Sources for Middle School Students

ENGAGE: Sources

This activity will give students an idea of how much they rely on energy sources every day and where that energy comes from. Place the students in small groups of 2 - 4. Give them 5 - 10 minutes to list all the ways they have used energy that day.

Guiding questions:

- What does the word energy mean? (The ability to do work)
- What does the word work mean? (A force causing an object to move)
- Does energy only refer to electricity? (No)
- How can you use energy more efficiently in your everyday life?
(Answers will vary)

As a large group, have the students determine general purposes for energy: transportation, light, cooking, heating or cooling, entertainment, cleaning, etc. Then have the groups classify their brainstormed lists according to general purposes. This step could spark some discussion and debate. For example, watching TV or using a computer could be classified as entertainment. It could also be classified as a way to gain information. Guide student discussion by suggesting that there could be more than one correct answer. Encourage them to back their ideas with proof. If a student argues that watching TV is an example of entertainment, their proof might be that they watch a specific TV show. Have each group record their ideas on a chart of their design.

EXPLORE: Energy Mind Map Activity (See worksheet: Energy Mind Map)

In this activity, the students will become familiar with a variety of energy sources. The activity is flexible enough that it can be assigned multiple ways: individually, in groups, whole class. If the teacher assigns each group or individual to only complete one mind map about a single energy source, it is important that they share their findings with others.

Consider assigning the following energy sources to students:

- Solar
- Wind
- Petroleum
- Coal
- Natural Gas
- Nuclear
- Hydro

EXPLORE: Energy Mind Map Worksheet

Complete an Energy Mind Map for your assigned energy source using this guide.

