Partnerships Implementing Engineering Education Worcester Polytechnic Institute – Worcester Public Schools Supported by: National Science Foundation

Energy: 4.C.1

Introduction to Energy

Grade Level	4
Sessions	1 – approximately 50- 60 minutes
Seasonality	N/A
Instructional Mode(s)	Whole class
Team Size	N/A
WPS Benchmarks	04.SC.PS.02
	04.SC.PS.09
MA Frameworks	3-5.PS.4
	3-5.PS.11
Key Words	Energy, Heat, Magnetism, Mechanical Energy, Sound Energy, Electrical
	Energy, Heat Energy, Magnetic Energy, Light Energy, Electricity, Wind,
	Water, Wood, Food, and Natural Gas

Summary

The students will be introduced to many different forms of energy through lecture and example. The student will then be given the opportunity to name the different types of energy that are available in their home. This lesson is meant to be delivered after the Sound Unit.

Learning Objectives

2002 Worcester Public Schools (WPS) Benchmarks for Grade 4

04.SC.PS.02 Identify the basic forms of energy (light, sound, heat, electrical, and magnetic). Recognize that energy is the ability to cause motion or create change. 04.SC.PS.09 Describe and model the basic structure of the atom, e.g., carbon and oxygen.

Additional Learning Objectives

- 1. 3-5.PS.4 Identify the basic forms of energy (light, sound, heat, electrical, and magnetic). Recognize that energy is the ability to cause motion or create change.
- 2. 3-5.PS.11 Recognize that sound is produced by vibrating objects and requires a medium through which to travel. Relate the rate of vibration to the pitch of the sound.

Required Background Knowledge

None