

**Weekly Lessons/Overview and Goals:** Students will be able to identify and explain different forms of energy

**TEKS:**

4.60 Force, motion, and energy. The student knows that energy exists in many forms and can be observed in cycles, patterns, and systems. The student is expected to:

4.6A Differentiate among forms of energy, including mechanical, sound, electrical, light, and thermal.

**Unit 2 Vocabulary**

Mechanical energy

Light energy

Switch

Thermal energy

Sound energy

**Essential Questions:**

What is energy?

What is mechanical energy?

What is electrical energy?

What is thermal energy?

What is sound energy?

How do we differentiate among different forms of energy?

**Monday: Electrical Energy**

- Electrical Energy Powerpoint - In groups, list as many things you can think of that turn off and on, share out, and add ideas to list

- Forms of Energy Exploration activity via STEMscopes.  
OR
- Set up stations similar to the above activity but tailored to the items you may have available. The important piece to this lesson is to ensure student inquiry.

Station # & Item	What do you notice	Which forms of energy?
1. flashlights		
2. Images of bikes		
3. Tuning forks		
4. hair dryers		
5. Flashlights		

- [Picture Vocabulary](#)

**Tuesday: Exploring Thermal Energy**

**(Remember, heat is energy and temperature is the measurement of that energy)**

- Thermal energy presentation

**If student are exhibiting mastery of the content, then have them make energy posters. Rubric is here**

If you feel students need additional support, they can repeat yesterday’s lab with different items.

Lab is below:

Energy Stations: Applying what we have learned. Set up 5 stations. Students will move with their group from station to station and determine which types of energy the objects at the table represent.

In their notebook, create a table:

Station # & Items	observations	Types of energy
Station 1: wind up toys, rulers, fan		
Station 2: radios		
Station 3: musical instruments		
Station 4: hand warmers		
Station 5: christmas lights, images of oven, fireplace		

**Wednesday:** Class discussion re lab from Tuesday. Complete a writing in science prompt.

**Prompt** {Complete in notebook}: We use different forms of energy every day. Which forms of energy do you use and how do they help you? Explain with at least 7 sentences.

**Thursday: Review for Exam - Be sure to review vocabulary!**

Forms of energy review.

If you place in presentation mode, the answer appears after a second click.

**Friday: DCA**

**Differentiation:** A variety of activities (application, concrete, and kinesthetic) will be incorporated into both days

to engage all learners. Kagan structures will be introduced the first week.