

FORMS OF ENERGY

Creating an interactive slide show to illustrate the various forms of energy will help the children understand it better.

Grade Level: three to five

Duration: 60–120 minutes

Materials: a presentation program like *Power Point* or *HyperStudio*, planning sheet, scanner, digital camera, clip art disks, drawing program (These last four are nice to have but are by no means essential for this activity.)

Procedure: Create an interactive slide show about the forms of energy. This activity lends itself well to cooperative learning groups. Each group could study a form of energy and become “experts.” After the activity is finished, the “experts” would be available for assistance when the presentation was being used.

Before the Computer:

- Divide the students into cooperative learning groups.
- Assign or have each group choose a form of energy.
- The groups will study the forms of energy and plan the slides for their sections of the presentation.
- Each group will need to collect pictures to scan, find clip art, draw pictures, and/or take pictures with a digital camera to provide graphic illustrations for the slides.
- A teacher-made planning sheet is helpful to guide the children, but encourage them to be creative.
- It might be helpful to have some “jump-off” topics to help with the research:

How does electrical energy affect our lives?

How are electricity and magnetism related?

What are some common devices for heating?

What are some sources for heat energy?

How can heat energy be conserved?

What is noise pollution?

How can sound energy be changed to other forms of energy?

What are some man-made light sources?

How would our lives be different if we had less sunlight? more sunlight?

What parts of the human body have potential energy?

What is the difference in potential energy and kinetic energy?

Name some kinds of mechanical energy.

What are six kinds of simple machines?

What kinds of energy am I using when I mix the batter for a cake?

FORMS OF ENERGY *(cont.)*

On the Computer:

- Learn the skills necessary to use the presentation program.
- Each group will make its section of slides for the presentation, and then the teacher or another learning group will combine them.
- The presentation can be as simple or complex as you want it to be, depending on the skill level and creativity of your students. One third-grade group I worked with made a presentation of over 100 slides—each one interactive in several ways—including games and quizzes for evaluation.
- The opening screen should have buttons leading to each section.

Internet Links:

<http://www.teachercreated.com/books/2428>

Click on page 63, site 1

On the *Power Point* home page you can download a viewer program so that computers that do not have the *Power Point* program can still see your presentations. There are also templates and graphics and ideas for presentations here.

<http://www.teachercreated.com/books/2428>

Click on page 63, site 2

A complete online course for learning and using Power Point sponsored by the Department of Computer Science at the University of Rhode Island.

<http://www.teachercreated.com/books/2428>

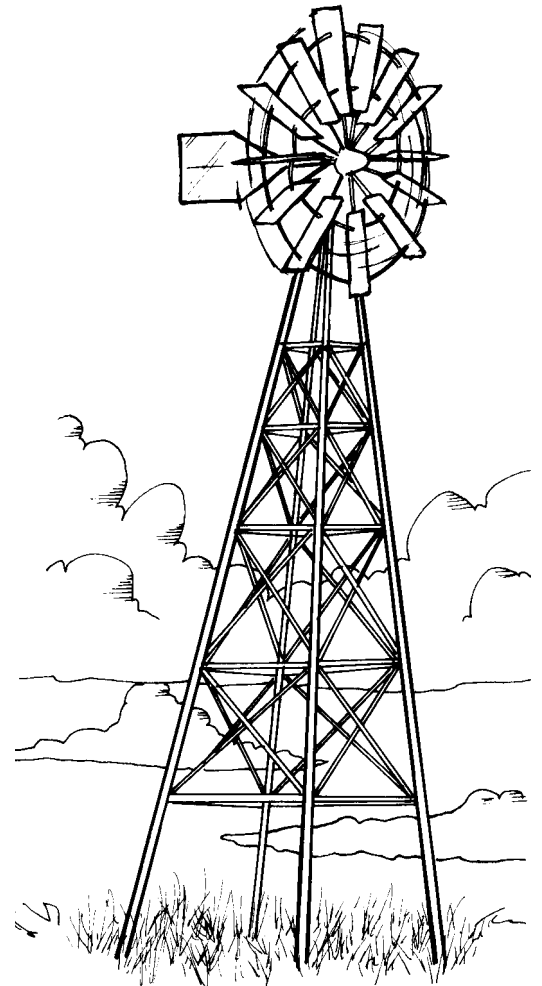
Click on page 63, site 3

A teaching unit on forms of energy from Saskatchewan, Canada can be found at this site.

<http://www.teachercreated.com/books/2428>

Click on page 63, site 4

At this site you will find lesson plans on energy and forces.



FORMS OF ENERGY (cont.)

Planning Guide

Slide #

Slide #

Buttons-links: _____

Buttons-links: _____

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Comments: _____

Slide #

Slide #

Buttons-links: _____

Buttons-links: _____

Comments: _____

Comments: _____

FORMS OF ENERGY *(cont.)*

Kinetic *Mechanical*

Chemical *Potential*

Forms of Energy

Sound *Electrical*

Heat *Light*

Click on the energy type.

Slide 1 Each word surrounding the title is a hidden button leading to the corresponding section.

You can see light every day. Indeed, without light you couldn't see at all. Some light is natural. Some light is man-made. Can you pick out which are man-made? Click on the right arrow to check.

This the first link from the word "Light" on slide 1.