

Title:	Painting Types of Energy
Grade(s):	5
Subject(s):	Science, Technology Education
Author:	ICAC Team
Overview:	During this lesson, students will review what they know about energy. Students will visit websites to gather information about energy and use what they learn to create an illustration and summary of the information.
Content Standards:	<p>SC (5) 4. Describe forms of energy, including chemical, heat, light, and mechanical.</p> <p>TC (3-5) 2. Use various technology applications, including word processing and multimedia software.</p> <p>TC (3-5) 5. Practice safe use of technology systems and applications.</p> <p>TC (3-5) 8. Collect information from a variety of digital sources.</p> <p>TC (3-5) 12. Create a product using digital tools.</p>
Local/National Standards:	
Primary Learning Objectives:	Using the Computer, Paint , and access to the Internet, students will illustrate and write a description of a form of energy.
Additional Learning Objectives:	
Approximate Duration of Lesson:	60 minutes
Materials and Equipment:	Pencil and scratch paper, board & markers
Technology Resources Needed:	Computer, Internet access, Internet Explorer , Paint , ELMO
Background/Preparation:	Students should be familiar with different forms of energy (chemical, heat, light, and mechanical).
Procedures/Activities:	<p>Step 1 Begin the lesson by asking students what they know about energy. Write their responses on the board. Make sure that they include basic types of energy such as chemical, electrical, heat, light, and mechanical.</p> <p>After students have responded, ask what they want to know about energy. Write these responses on a separate area of the board.</p>

Divide the students into groups of 3-5 and explain what they will be doing as a group in this lesson:

- Choosing a type of energy to investigate;
- Searching the websites to find information about the type of energy;
- Illustrating the type of energy using **Paint**;
- Writing a description of the type of energy.

Step 2 Remind students of the classroom/school rules regarding Internet use. For this lesson, students will be given specific websites to visit (listed at the end of Step 2).

To access the Internet:

Click on the **Internet Explorer** icon .
The screen will look like this:



Type the web address into the dialogue box.

Students can create a Word document or use pencil & paper to take notes on the information they find. Several kid-friendly websites are listed below:

www.wordcentral.com

This website has a dictionary students can use to look up definitions for energy.

www.eere.energy.gov/kids

This "Kids Saving Energy" site has information, games, and quizzes related to saving energy.

www.eia.doe.gov/kids

This "Energy Kids" site from the U.S. Energy Information Administration provides information about energy, its history and sources.

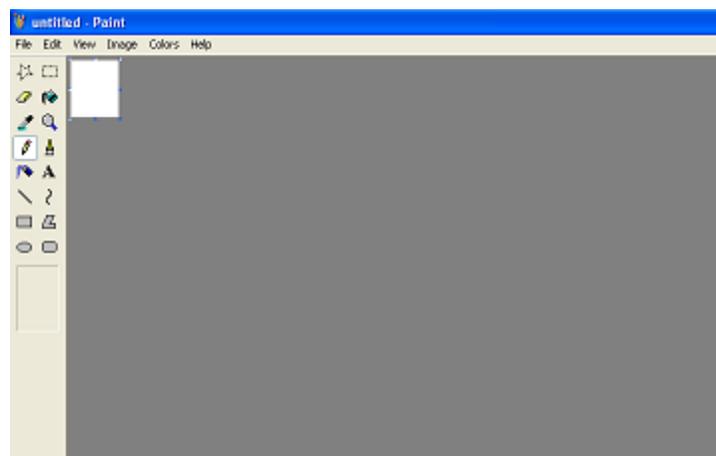
www.touchstoneenergykids.com

This "Kids Zone" site from Touchstone Energy has information about energy facts and energy saving, as well as tips for teachers.

- Step 3 After the students have explored these sites and taken notes, have them illustrate a type of energy using the **Paint** application. Paint can be accessed by clicking on the paintbrush icon in the Start menu at the bottom left of the desktop (you may need to click on “All Programs” and then “Accessories” to find **Paint**):



If needed, review with student how to use the Paint program.



- Step 3 After students have completed their Paint drawing, have them write a detailed description to accompany their illustrations. The written description should be a paragraph including at least four facts regarding the type of energy they have illustrated.

In order to insert text into the Paint activity, click the “**A**” that appears in the second row of tools. Then click on where the text is desired to be placed and begin typing.

- Step 4 When students are finished with their illustration and description, ask students to share what they have learned. Use a Promethean Board or Elmo and projector to show their illustrations to the whole class.

Discuss the project. Were all of the original questions answered? What else would they like to know? How could they find out these answers?

Attachments: Rubric

Assessment

Strategies: See rubric

Extension: Have students create a fictional story that includes at least one type of energy. They may illustrate their story using Paint.

Remediation: Have students include bulleted detailed information with their illustration instead of a written paragraph.

Rubric for "Types of Energy"

Score	1 Not at all	2 Somewhat	3 Mostly	4 Always
Student used Computer and Internet appropriately				
Illustration accurately depicts type of energy				
Description includes at least four accurate facts about a specific type of energy				
Student contributed to group in a positive manner				