

#### **Subject Areas:**



Science









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The mission of The NEED Project is to promote an energy conscious and educated society by creating effective networks of students, educators, business, government and community leaders to design and deliver objective, multisided energy education programs.

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### **Teacher Advisory Board**

In support of NEED, the national Teacher Advisory Board (TAB) is dedicated to developing and promoting standards-based energy curriculum and training.

### **Energy Data Used in NEED Materials**

NEED believes in providing teachers and students with the most recently reported, available, and accurate energy data. Most statistics and data contained within this guide are derived from the U.S. Energy Information Administration. Data is compiled and updated annually where available. Where annual updates are not available, the most current, complete data year available at the time of updates is accessed and printed in NEED materials. To further research energy data, visit the EIA website at www.eia.gov.



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# **Primary Energy Poll Guide**

**Grades:** K-2 **Time:** 20 Minutes

### A Quick Look At The Energy Poll

The *Primary Energy Poll* can be used to assess students' basic energy knowledge, as well as their opinions about energy before and after your classroom energy unit.

Make one copy of the poll for each student. If you prefer, you can project the poll and have students answer the questions on a piece of paper. In either case, keep the results of the pre-poll so that students can compare their answers after your energy unit is completed.

#### **∠**Procedure

- •Direct students to take the poll as honestly as possible and not to make wild guesses. Explain that the poll will be an important assessment tool to show what they have learned and how their attitudes have changed.
- •Once you have administered the poll, go over the answers with the class. As a supplemental activity, discuss and chart the answers to the opinion questions. Collect the answers and save them to use after your energy unit is completed.
- Polls can be sent to NEED for analysis. We would love to see what your students are learning.
- •If you are able, share your students' poll results with us at NEED by sending them to the address below via mail, fax, or email:

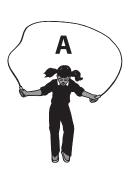
The NEED Project 8408 Kao Circle Manassas, VA 20110 info@need.org Fax:1-800-847-1820

## **Primary Energy Poll Answer Key**

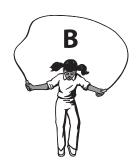
1.	Α	8.	Α
2.	В	9.	C
3.	Α	10.	C
4.	Α	11.	В
5.	C	12.	C
6.	В	13.	Α
7.	Α	14.	В

## **Science of Energy**

1. Which child would feel hotter?







- $\triangle$
- (B) F
- 2. What order shows the flow of energy through the food chain?









- A Sun, Bread, Wheat, Girl
- B Sun, Wheat, Bread, Girl
- © Bread, Wheat, Sun, Girl

3. Which boy would have the longest shadow?







- (A) A
- B B
- © C
- 4. Which object would a magnet attract?



- A The Paper Clip
- B The Comb
- © The Wooden Spoon

### **Sources of Energy**

#### 5. Which energy source is renewable?

- A Coal
- B Propane
- © Solar

#### 6. Which energy source is a fossil fuel?

- (A) Wind
- (B) Coal
- © Biomass

#### 7. Which energy source provides gasoline for cars?

- A Petroleum
- B Propane
- © Natural Gas

# 8. Which energy source depends on the water cycle?

- A Hydropower
- Solar
- © Wind

## 9. Which energy source comes from deep inside the Earth?

- A Biomass
- B Hydropower
- © Geothermal

#### 10. Which energy source makes the most electricity?

- A Propane
- B Petroleum
- © Natural Gas

### **Electricity**

#### 11. What is electricity?

- A Moving Atoms
- B Moving Electrons
- © Moving Wires

# 12. When you turn on a TV, which item shows that electricity is being used?

- (A) The Picture
- The Sound
- Both the Picture and the Sound

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## **Saving Energy**

#### 13. Which is a way to save electricity?

- Use a fan instead of air-conditioning to cool your house
- Open the windows when you turn on the airconditioning
- © Leave the lights on when you leave the room for just a few minutes

#### 14. Which way of traveling will save the most fuel?

- A Ride the school bus
- B Walk to school
- © Have an adult drive you to school

### **Opinion**

Tell us if you agree with these statements.

#### 1. There are things I can do to save energy.

- A No, I don't agree.
- B I agree some.
- © Yes, I agree.

#### 2. Learning about energy is fun.

- A No, I don't agree.
- B I agree some.
- © Yes, I agree.

#### 3. I know a lot about energy.

- A No, I don't agree.
- (B) I agree some.
- © Yes, I agree.

#### 4. I like to do activities about energy.

- A No, I don't agree.
- B I agree some.
- Yes, I agree.

## Leadership

How much do you like doing these school activities?

#### 1. Work in a group

- A I don't like to
- B I like to some
- © I like to a lot

#### 2. Follow directions

- A I don't like to
- B I like to some
- © I like to a lot

#### 3. Help others in my group

- A I don't like to
- B I like to some
- © I like to a lot

#### 4. Listen to my teacher

- I don't like to
- B I like to some
- © I like to a lot

#### 5. Help with classroom activities

- A I don't like to
- B I like to some
- I like to a lot

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