

# Discover Your Changing Climate

Rangers in the Classroom—Pre-visit Lesson Plan



**Grade Level:** 5th and 6th

**Setting:** Classroom and home

**Duration:** 1 hour

## Standards Addressed:

5th Grade

° Investigation & Experimentation:

6.g, 6.h

° Writing Applications:  
2.3

6th Grade

° Earth Sciences—Resources:

6.a

° Writing Applications:  
2.3.b

° Written & Oral English Language Conventions:  
1.1—1.4

## Introduction:

Welcome to Rangers in the Classroom! We are looking forward to visiting your class for our Discover Your Changing Climate program. To help prepare your class for the ranger visit, we have created a pre-visit activity to introduce your students to some of the concepts we will cover in our program. If you are interested in additional preparation, the program outline includes a vocabulary list and can easily be found on the website at:

<http://www.nps.gov/seki/forteachers/index.htm>. By exploring a few concepts and vocabulary words with your students prior to our visit, you will help us hit the ground running.

Have fun and we'll see you soon!

## Materials:

- ° Worksheets
- ° Pen or pencil

## Instructions:

1. Students will conduct an energy-use inventory of their home with page one of the worksheet as their guide.
2. Students will reflect on what they learned during the energy-use inventory using page two of the worksheet.
3. The goal of this pre-visit activity is to make the students aware of how energy is used in their home.
4. Ask students to keep these worksheets as they will use them with the post-visit activity.

# Discover Your Changing Climate

Rangers in the Classroom—Pre-visit Activity



## Energy Inventory

### Energy Inventory: How do you use energy in your home?

Have you ever flipped on a light switch in your house and wondered where the energy powering the light came from? The energy that runs our homes, schools, businesses and powers our transportation comes primarily from the burning of fossil fuels like coal, oil or natural gas. Let's look at how and where energy is used in your home. Conduct a survey of energy use in your home. Use the questions below as your guide. Ask an adult in your home if you do not know the answer to the question.

1. How do you get to school in the morning? \_\_\_\_\_
2. If you are picked up after school, does the driver leave the car running while waiting for you?  
\_\_\_\_\_
3. How many appliances in your kitchen run on electricity?\_\_\_\_\_
4. Are these appliances left plugged in when they are not in use?\_\_\_\_\_
5. Do you recycle plastic?\_\_\_\_\_ aluminum?\_\_\_\_\_ paper?\_\_\_\_\_ cardboard?\_\_\_\_\_
6. Do you wash your clothes in hot, warm, or cold water?\_\_\_\_\_
7. Do you use a dryer or hang your clothes out to dry?\_\_\_\_\_
8. If someone in your family has a cell phone, do they leave the charger plugged in even when the phone is not charging?\_\_\_\_\_
9. When you go to the grocery store, do you get plastic bags, paper bags, or do you bring your own?\_\_\_\_\_
10. How many light bulbs are used in your house?\_\_\_\_\_
11. After dinner, do you let your leftovers cool off before you put them in the refrigerator?\_\_\_\_\_
12. How long do you stay in the shower? (time it if you don't know)\_\_\_\_\_
13. How do you heat your home in the winter? (examples: space heaters, wood stove, central heat, radiators)\_\_\_\_\_
14. If you have central heating, what temperature is your thermostat set at?\_\_\_\_\_

Every time you use electricity, carbon dioxide is emitted into the atmosphere. You will learn the important role carbon dioxide plays in global climate change when the ranger comes to visit your class. For now, just keep your eyes open to how and where you use electricity.

# Discover Your Changing Climate

Rangers in the Classroom—Pre-visit Activity

## Energy Inventory continued...



Have you ever thought about how and where energy is used in your home?

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Imagine that you have to pay the electrical bill for the next six months. Do you think you would pay more attention to how much energy is used in your home? Why or why not?

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What did you learn by conducting this survey of your home?

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Where do you think the most energy is used in your home? (Examples: driving the car, heating the house, cooking, the TV, etc.)

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How do you use energy each day? List all the ways you can think of. (Examples: hot shower, cooking food, watching TV, playing on a computer or video game system, etc.)

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How could you help conserve or save energy in your home?

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Do you think the energy choices you make every day can impact the entire world? Why or why not?

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