

## COLD FOOD ONLY DAY

- Grade Level: K-3
- Subjects: Social Studies, Math
- Suggested Time: 1 hour, plus the Cold Food Only Day



*Create a Cold Food Only Day to show the amount of energy consumed in preparing food.*

### Materials

Chalkboard or whiteboard, Cold Foods Only Day Worksheet, pencils, poster board and crayons or markers.

### National Standards

#### Math:

- Compute fluently and make reasonable estimates.
- Understand measurable attributes of objects and the units, systems, and processes of measurement.
- Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.

#### Social Studies:

- Scarcity.
- The environment and society.
- Roles of the citizen.

### Ohio 2010 Standards

#### Math:

- Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another. (1)
- Draw a picture graph and a bar graph to represent a data set with up to four categories. Solve simple put together, take-apart, and compare problems using information presented in a bar graph. (2)
- Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. (3)

### Social Studies:

- Individuals have shared responsibilities toward the achievement of common goals in homes, schools and communities. (K)
- Families interact with the physical environment differently in different times and places. (1)
- Human activities alter the physical environment, both positively and negatively. (2)
- Evidence of human modification of the environment can be observed in the local community. (3)
- Individuals make the community a better place by solving problems in a way that promotes the common good. (3)

### Objectives

The student will be able to:

- Explain how energy is used in the kitchen.
- Add, subtract, and create a bar graph to compare energy costs.
- Create a cold foods only menu.
- Plan and advertise a school-wide Cold Food Only Day.

### Teacher Preparation

- Gain support from the building principal and kitchen staff to hold a Cold Food Only Day.

### Variations:

- For kindergarten, do not use the worksheet or graphing activity. Instead, ask students to draw pictures of cold foods after discussing how hot foods require energy to prepare. You might take a trip to the cafeteria or lunch room to see the types of hot foods served at school. Hold a cold food snack time instead of lunch.
- For first grade, do not use the graphing activity.

### Introduction

- Ask students to name their favorite school lunches.
- Brainstorm on the board how energy is used to prepare a hot school lunch (stove, oven, microwave, washing dishes, refrigeration).
- Ask students how they could conserve energy during food preparation.
- Inform students that they will be creating a menu for a Cold Food Only Day for the whole school.

### Activities

- Distribute the Cold Food Only Day Worksheet. As a class, read through the table and answer questions 1-3.
- Have students create a bar graph representing the amount of energy used by each method.
- Using the bar graph, answer questions 5-7.

- Individually or in small groups, ask students to brainstorm cold foods from every food group. (Explain or review the food groups if necessary.)
- As a class, list on the board some cold food ideas from each food group. Then take a vote to choose 2 from each category to create the cold food menu.
- Explain that you will submit the menu to the kitchen staff and they will choose between the different menus each class created.
- Break students into groups to create Cold Food Only Day posters to inform others about the day. Include the date and how cold food saves energy.

### Extensions

- Discuss why one might prepare foods in a particular way, even if it costs more.
- Discuss why the large commercial ovens at school cost more to use than home appliances (though may not be more per serving).
- The teacher may contact a local newspaper or news station and invite them to cover the Cold Food Only Day.
- Students may create a plan for saving energy in the kitchen at home and present it to their families. They may hold a Cold Food Only Day or Meal at home.

### Closing

- Review the lesson and ask students to think of ways to save energy when storing cold foods in the refrigerator (such as closing the door quickly, getting all items out at once, returning all items at once, and keeping the refrigerator full versus empty).
- Congratulate students on the success of Cold Food Only Day.

### Worksheet

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**See: Cold Food Only Day Worksheet**

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