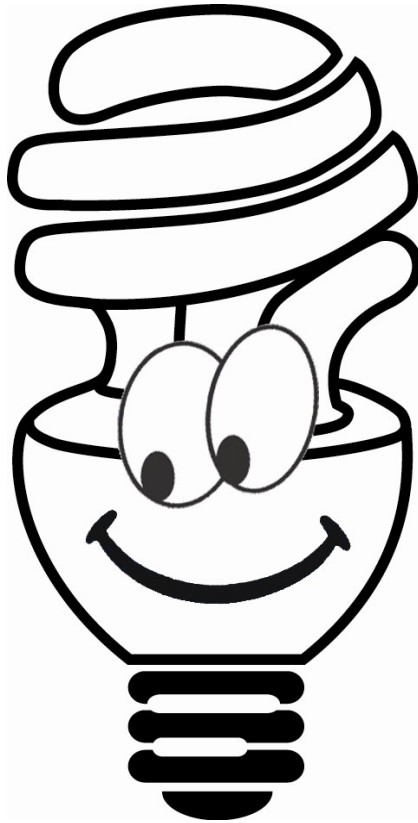


**California Preschool Energy Efficiency  
Education Activities**



**“BRIGHT IDEAS FOR CHILDREN”**

California Preschool Energy Efficiency Program (CPEEP)



## ●●●●●●● Preschool Energy Efficiency Activities ●●●●●●●

The California Preschool Energy Efficiency Program (CPEEP) education materials were created to introduce children and their families to the importance of energy conservation. Information is provided to show simple actions that can be done to help conserve energy and save money at home. The following activities were designed to have fun and reinforce the importance of energy conservation.

The California Preschool Energy-Efficiency Program is a collaboration of organizations:

- Low-Income Investment Fund (lead agency)
- California Head Start Association
- California Child Care Resource and Referral Network
- California Department of Education (consultation and support)
- Intergy Corporation (engineering and technical support)

<http://www.liifund.org/PROGRAMS-NEW/CHILDCARE/CPEEP/index.html>

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## ●●●●● Meeting the Head Start Performance Standards ●●●●●

Head Start Performance Standards are the mandatory regulations that grantees and delegate agencies must implement in order to operate a Head Start and/or Early Head Start program.

[www.eclkc.ohs.acf.hhs.gov](http://www.eclkc.ohs.acf.hhs.gov)

The CPEEP project “BRIGHT IDEAS FOR CHILDREN” supports these standards.



### Performance Standard 1304.21(a)(4)(i)

Grantee and delegate agencies must provide for the development of each child’s cognitive and language skills by: (i) Supporting each child’s learning, using various strategies including experimentation, inquiry, observation, play and exploration;

**Rationale:** Through meaningful interactions with adults, other children, and a rich environment, children gain knowledge and understanding of the world. Strategies that support the development of cognitive and language skills allow exploration in both indoor and outdoor environments.

**Guidance:** It is essential to provide materials and opportunities for learning, and to design meaningful, concrete experiences that promote children’s interactions. Adults use a variety of teaching strategies to support children’s learning by:

- Providing opportunities to learn through experimentation, inquiry, play, and exploration
- Planning experiences for children of all ages to learn the functions and properties of objects, and to classify materials into groups
- Offering a rich variety of experiences, projects, materials, problems, and ideas to extend children’s thinking and to support their interests
- Supporting children’s cognitive development in the program and in the home by posing problems, asking questions, and making comments and suggestions that stimulate children’s thinking and extend their learning
- Having conversations with children to expand their thinking and learning; and
- Providing opportunities for children of all ages to acquire knowledge in areas such as science, social studies, the creative arts, numeracy, and language and literacy.

## ●●●●●●● Development of CPEEP Education Activities ●●●●●●●

The committee researched and reviewed energy conservation messages and met by conference calls to collaborate and develop preschool age activities that deliver energy conservation messages to classrooms and to children's homes.

## ●●●●● Committee Members ●●●●●

Iris Bradford, Marin Head Start  
Denyse Cardoza, Placer Community Action Council, Inc.  
Kristine Edkins, Placer Community Action Council, Inc.  
Terry Espinoza Baumgart, Low Income Investment Fund  
Renee Herrera, Riverside County Office of Education  
Norman Lorenz, Cosumnes River College  
Al Prince, Contra Costa County Community Services Dept.  
Lisa Schifano, Riverside County Office of Education  
Paula Carrino, California Head Start Association

## ●●●●● Getting Started ●●●●●

The activities presented here are intended to assist classroom teachers with fun and interesting resources that support a deeper understanding of energy conservation.

We encourage you to review these materials and build them into your curriculum planning process.

In addition to these activities, we have books and websites listed in the back for you to use if you want to supplement your personal knowledge.

We are emphasizing four elements:

- Parent involvement
- Music
- Math
- Conservation/Art

## ●●●●● Program Goals/Outcomes to Meet Head Start Standards ●●●●●

The Head Start Child Outcomes Framework is intended to guide programs in their curriculum planning and ongoing assessment of the progress and accomplishments of children. The Framework also is helpful to programs in their efforts to analyze and use data on child outcomes in program self-assessment and continuous improvement.

- Turning Off the Lights Song -- addresses the following Head Start Child Outcomes Framework: Creative Arts – Music
  - Participates with increasing interest and enjoyment in a variety of music activities, including listening, singing, finger plays, games, and performances.
  
- Count and Draw Take Home Activity -- addresses the following Head Start Child Outcomes Framework: Mathematics - Number & Operations
  - Demonstrates increasing interest and awareness of numbers and counting as a means for solving problems and determining quantity.

This activity also addresses the DRDP-R measure of building cooperative relationships with adults.

- Lights Off Door Hanger -- addresses the following Head Start Child Outcomes Framework: Physical Health & Development - Fine Motor Skills
  - Develops growing strength, dexterity, and control needed to use tools such as scissors, paper punch, stapler, and hammer.

We hope you enjoy these materials!

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## Family Checklist for Winter



### In Winter: Keep The Cold Out

- ◇ Keep windows and doors closed to prevent the loss of heated air.
- ◇ Close curtains and window coverings at night, and open them during the day.
- ◇ Dress comfortably for the weather.
- ◇ Put a sweater on or other warm clothing to avoid turning up the heat (health permitting).
- ◇ Use an extra blanket while sleeping or to cuddle up with during the day.

## Family Checklist for Summer

### In Summer: Keep The Cold In

- ◇ Adjust your air conditioning thermostat to 78°F or higher (health permitting).
- ◇ Maximize natural light.
- ◇ Turn off all unnecessary lights.
- ◇ A 5° higher setting on your air conditioning thermostat will save about 10% on cooling costs.
- ◇ Keep windows and doors closed to prevent the loss of cooled air.
- ◇ Adjust, and preferably close, as many blinds and window coverings that receive direct sun during the daylight hours.
  - Note: Do this in rooms where lights do not need to be on.



## Cut Costs by Saving Energy!

Follow These Tips Below to Reduce Your Utility Bills and Help Save Energy:

### Lighting:

- **Save 75% on lighting costs** by replacing all standard incandescent light bulbs - (regular screw-in light bulbs) in your home with compact fluorescent light bulbs (CFLs - oftentimes the "curly" or "squiggly" bulbs).
- Make sure to turn off all lights when you leave the room or when they are not in use.



### Appliances and Electronics:

- **Unplug electronics, battery chargers and other equipment when not in use.** Together, these small items can use as much power as your refrigerator. (Examples of electronics are computers, blenders, toasters, hair dryers, television, stereo, cell phone adaptors, video games etc).
- **Enable "power management" (sleep mode) on all computers** and make sure to turn them off at night. A laptop computer uses up to 90% less energy than bigger desktop models.
- **Plan what you will be getting out of the refrigerator BEFORE you open the door. Try to keep the refrigerator door closed as much as possible.**
- **Lower refrigerator settings to 35° F and 38° F** ([www.energystar.gov](http://www.energystar.gov)).
- **Remove empty refrigerators as they use more energy than full ones and are a safety hazard to children.**

### Air Conditioner/Heater:

- **Save about 10% on cooling costs** by setting your thermostat 5° higher than normal on your air conditioner.
- It is recommended to set your home thermostat at **68°F in the winter and 78° F in the summer.**
- **Reduce air conditioning costs** by using fans, keeping windows and doors shut, and closing window shades during the day.
- **Locate air leaks in your home** by holding a lit incense stick next to windows, doors, attic hatches, and other locations to see the direction of the smoke stream. If the smoke stream travels horizontally, you may need extra caulking, sealing or weather stripping to seal the air leak.

### Water and Water Heater Usage:

- **Turn your water heater down to 120° or the "Normal" setting when home**, and to the lowest setting when away. Water heating accounts for about 13% of home energy costs. **Wash your clothes in cold water.** About **90%** of the energy used in a clothes washer goes to water heating.
- Use high speed spin option on washer, if available.
- Air dry clothes whenever possible.
- Run your dishwasher and clothes washer only when fully loaded. **Fewer loads will help to reduce your usage of energy and water.**
- Take shorter showers and use less water in the bathtub.



MUSIC  
Song

## TURNING OFF THE LIGHTS



(To the tune of "Farmer in the Dell")

We're turning off the lights  
We're turning off the lights  
To help save energy  
We're turning off the lights

We close our doors and windows  
We close our doors and windows  
To help save energy  
We close our doors and windows

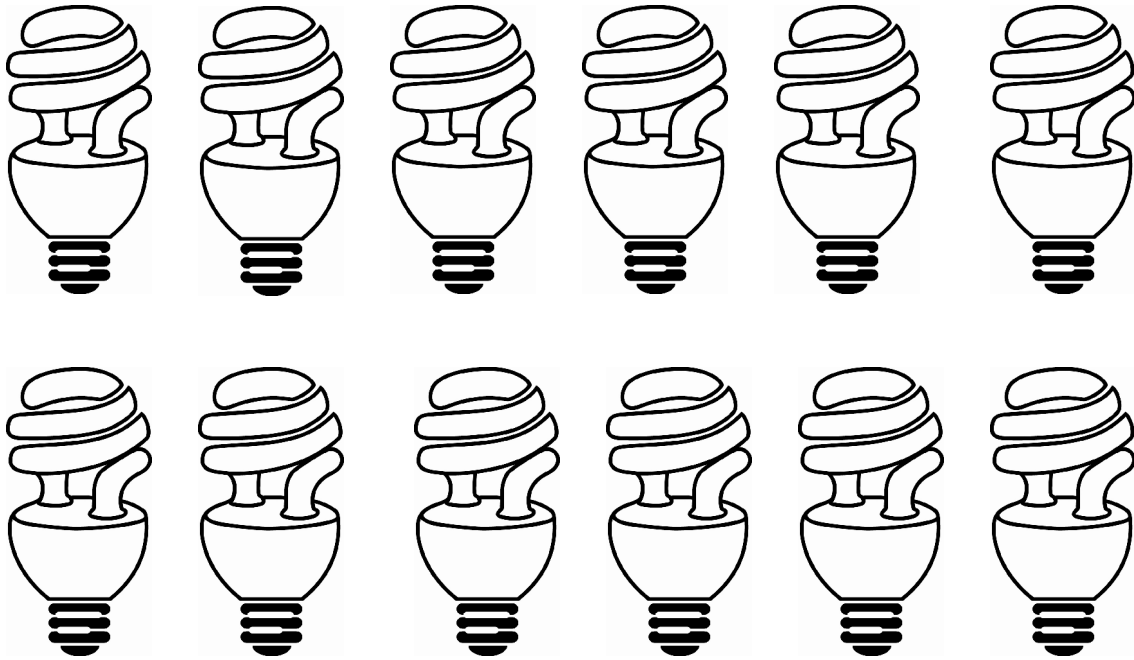
We use the curly light bulbs  
We use the curly light bulbs  
To help save energy  
We use the curly light bulbs

\*\*\*Have fun, ask the children for other ideas on conserving energy!

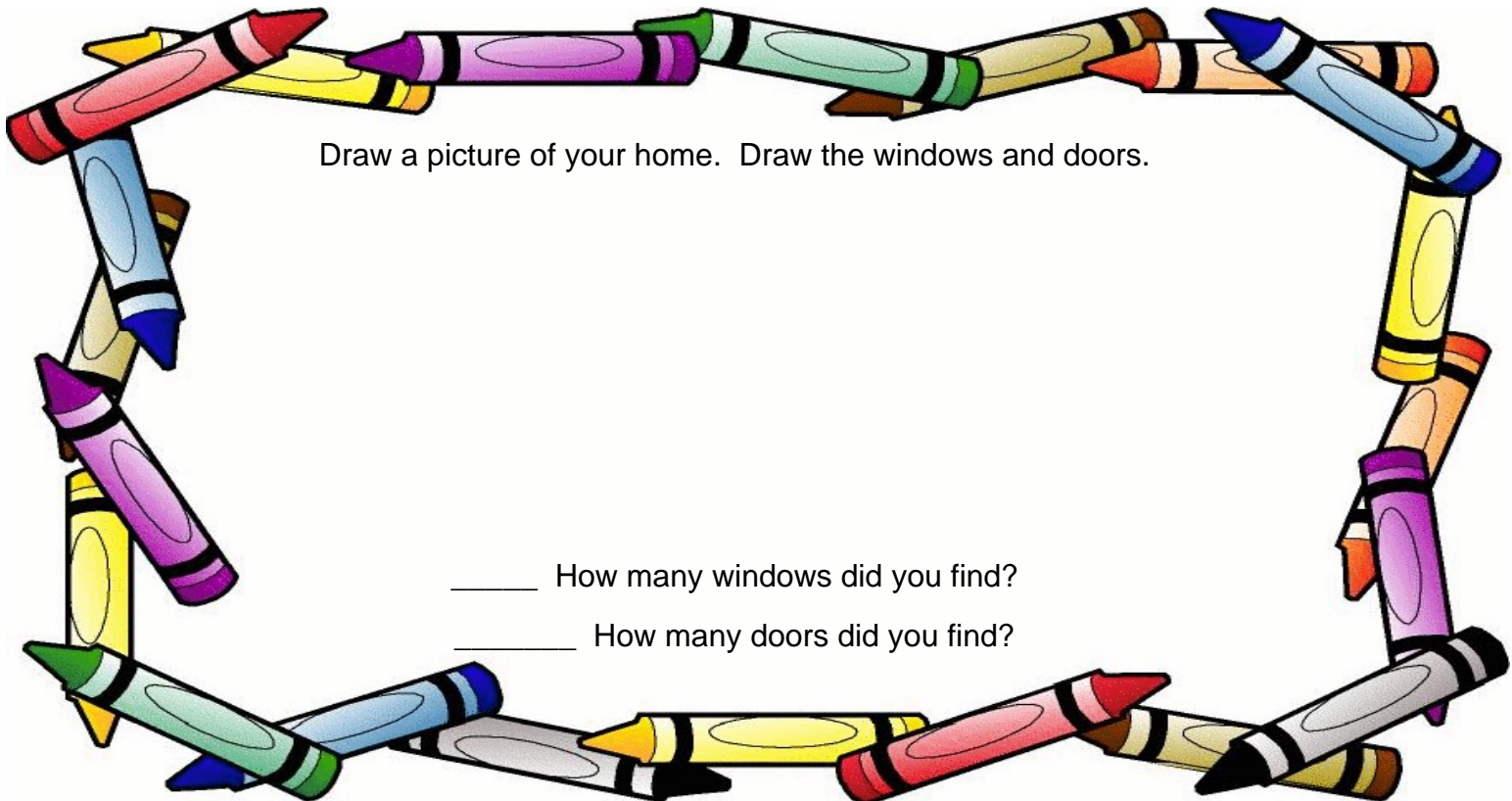
●○○●○○○○○ by Iris Bradford ●○○●○○○○○

**+=+=+=+=+=+=+=+=+= MATHEMATICS/NUMERACY +=+=+=+=+=+=+=+=+=**  
**+=+=+=+= Take Home Activity - Count and Draw +=+=+=+**

Find how many light bulbs are in your home. Color in a light bulb for each one you find in your house. Use a different color for each room.



\_\_\_\_\_ How many light bulbs did you find?



Draw a picture of your home. Draw the windows and doors.

\_\_\_\_\_ How many windows did you find?

\_\_\_\_\_ How many doors did you find?



## LIGHTS OFF DOOR HANGERS



### SUGGESTED MATERIALS:

Foam Sheets in multiple colors

Small foam shapes

Spangles, sequins, puffy paint, or glitter glue for added creativity

Scissors

Glue

### PROCEDURE:

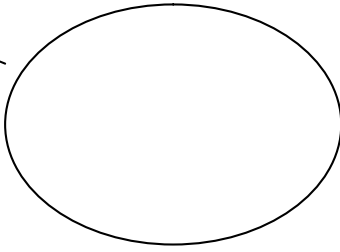
*Teacher* – cut pre-printed door hanger in half. Children may choose the message that is of most interest to them. With a permanent marker, draw a solid line down the center of each foam sheet. Trace a dotted line leading to circle at the top of each divided section of the foam (this will provide a visual guide for the children)

*Child* – choose foam sheet, cut along lines to create frame of door hanger. Cut out desired “Lights Off” message and glue to door hanger. Use craft materials (small foam shapes, spangles, sequins, etc...) to decorate foam door hanger. Let dry.

Include other conservation messages during conversation that the children can share with their parents.

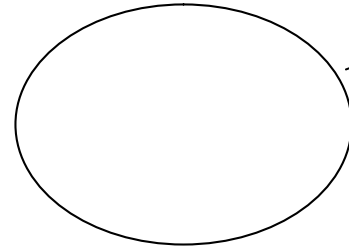
### Examples:

- Turn off the TV, video games, stereo, DVD, and computer when we are done using them.
- Using the microwave, toaster oven, and crockpot can save energy too. They use less energy than the stove and oven. Don't PEEK! Every time you open the door or lift the lid, heat will escape and it will take longer to cook.



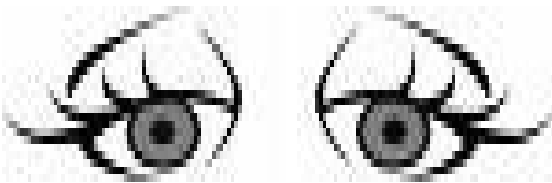
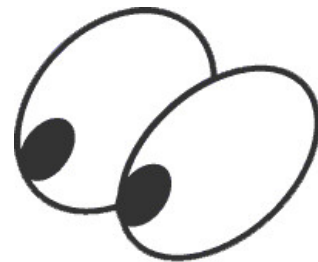
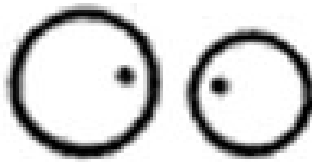
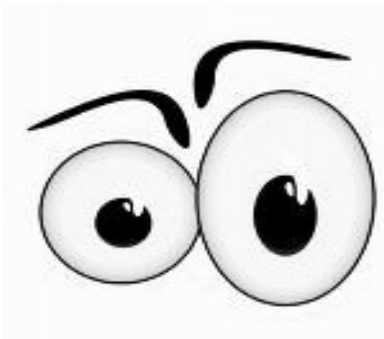
# **Are the Lights Off?**

Replace old light bulbs (incandescent) with the “curly” compact fluorescent light bulbs (CFLs) and save 75% of lighting costs.



# **Don't Forget.. Turn the Lights Off**

Replace old light bulbs (incandescent) with the “curly” compact fluorescent light bulbs (CFLs) and save 75% of lighting costs.



Replace old light bulbs (incandescent) with the “curly” compact fluorescent light bulbs (CFLs) and save 75% of lighting costs.



●●●●●●●● **Additional Resources** ●●●●●●●●

## Links:

Community Services & Development, California Health and Human Services Department: <http://www.csd.ca.gov/>

- ◇ Printable Energy Bears Coloring Book  
<http://www.csd.ca.gov/documents/Forms/DispForm.aspx?ID=4>

The Energy Information Administration (EIA), U.S. Department of Energy:  
<http://www.eia.doe.gov/>

- ◇ Energy Kids Page <http://www.eia.doe.gov/kids/>

National Energy Education Development Project:  
[www.need.org](http://www.need.org)

- ◇ Printable NEED Energy Infobooks <http://www.need.org/EnergyInfobooks.php>

