



Be a team player

**\*Help save energy\***

# Energy Tip

When it comes to energy efficiency, the same principles apply outside of the workplace as they do in the workplace. Energy-saving behaviors easily translate from the workplace to your home environment. By using energy-efficient choices wherever you are, you make an even bigger difference on conserving the world's energy resources. Apply the following tips in any setting:

- Turn lights off when leaving a room
- At a minimum, turn off monitor between uses.
- Use ceiling fans to blow down warm air in the winter and to help circulate cool air in the summer.
- Use compact fluorescent bulbs in lamps.
- Use natural lighting from windows to replace or supplement electric lighting.
- Be on alert for machines or equipment that shouldn't be left running.
- Shut computer down (CPU and Monitor) and other appliance at night.



Thank you for helping to conserve our energy resources.

# Season's

## Season of Change-

In Iowa they say if you don't like the weather, wait 5 minutes and it will change. That is so true in the Spring- we have cool mornings- requiring buildings to be heated and warm afternoons when we want to open windows to let in the fresh spring air. Every building is a bit different in how it holds heat so before opening windows please verify with your building custodian that the heat is OFF. Then open the windows and enjoy the spring air.



Thank you for helping to conserve our energy resources.

# Energy Tip



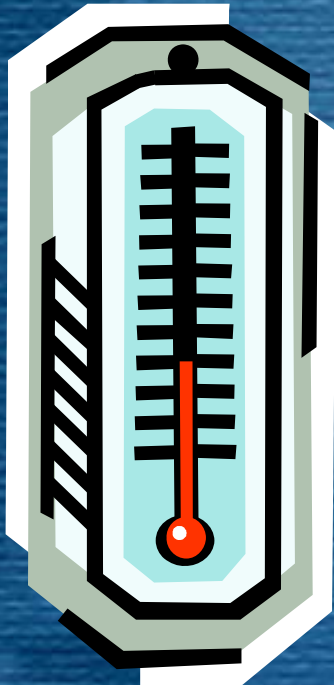
Winter Break provides the District with many opportunities to reduce energy consumption.

- All buildings will operate at a lower temperature (night set back). Contact your building custodian if an area will be occupied.
- Lights are to be turned off in all unoccupied areas with the exception of security lights.
- All computers are to be off, as well as office equipment not in use; printers, copiers, fax machines.
- Any curriculum/break room refrigerators should be consolidated if possible and unplugged.
- Pull down and close blinds in classrooms and offices.

Thank you for helping to conserve our energy resources.

# Energy Conservation over Break

The 5 day Thanksgiving Break provides the District with many opportunities to reduce energy consumption.



- All buildings will operate at a lower temperature (night set back).
- Lights are to be turned off in all unoccupied areas with the exception of security lights. All computers are to be off (remember to turn off the monitor too), as well as office equipment not in use; printers, copiers, fax machines.
- Pull down and close blinds in classrooms and offices.

Thank you for helping to conserve our energy resources.



# Summer Shutdown for Building Staff

1. Remove all materials from heating/ventilation units- we do ventilate in early morning hours to help “cool” the building with outside air.
2. Take all plants and animals home.
3. Turn off and unplug any task or display lighting in your room. Take home personal lighting.
4. Check the faucets in your classroom or work room to make sure they are turned off tightly. Report any leaks to your head custodian.
5. Turn off and unplug all unnecessary electric appliances (copiers, monitors, printers, scanners, TVs, VCR/DVD players, fax machines, radios, water coolers, stereos). Take home all personal electric appliances.
6. Empty, turn off, and unplug all refrigerators. Take home all personal refrigerators if not already done.

Thank you for helping to conserve our energy resources.



# Summer Energy Conservation Check List

## HVAC Systems

- All classroom/media centers heating/cooling/ventilation systems and exhaust fans have been swept off by the district energy management system. Except where summer programming exists.
- Smaller restrooms have exhaust fans which operate manually and should be in off position.
- Schedule meetings/class locations based on HVAC zones- activate the smallest area necessary. (See building zone maps).
- Open doors and windows to provide natural ventilation.

## Lighting

- Schedule all parking lot lights to be off, except when needed for evening activities.
- Check exterior building lights schedule to be on after sunset, verify they are functioning correctly.
- Turn interior lights on only in the immediate areas where work is being done, use daylight as much as possible.
- Keep hallway lights off, unless directly working in halls, use daylight as much as possible.
- Turn off all display case lighting, if connected to hallway lighting, disconnect lamps. Turn in work order to have systems separated.

Thank you for helping to conserve our energy resources.



# Summer Energy Conservation Check List

## Water

- Water heaters and booster heaters will be turned off by maintenance for all kitchens not operating.
- Backup water heaters will be turned off by maintenance.
- When possible do not use domestic (building) water for landscape or lawn areas; sewer charges are applied.
- Pay attention and report irrigation problems (broken heads, running or pooling water, or browning fields)
- Check faucets for leaks. Submit work order for any problems you are unable to correct.
- Check toilets and urinals for excessive water rinse. Submit work order to correct any problems noted.

## Building Envelope

- Turn window blinds so underside of blade faces in. Pull blinds down to  $\frac{3}{4}$  length. This will help keep the building cool.
- Check weather-stripping on exterior doors. Submit work order for necessary repairs.

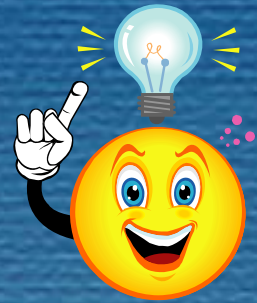
## Plug-Loads

- Empty contents of refrigerators and unplug.
- All non-curriculum refrigerators are to be removed from buildings.
- Unplug TV's, VCRs, stereos, radios etc.
- Unplug scanners and printer which will not be used.
- Unplug vending machines; designate one for use by building staff.
- Unplug drinking fountains, designate one for use by building staff.

Thank you for helping to conserve our energy resources.



# Energy Tip



- Check exterior lighting, adjust for daylight changes.
- Turn interior lights on only in the immediate areas where work is being done.
- Check weather stripping on exterior doors, process work orders for necessary repairs.
- Turn hallway lights off, unless directly working in halls.
- Keep classroom doors and windows closed when air conditioning is operating.
- Select rooms for classes and meetings that are appropriate to size of meeting group. This eliminates cooling of excessive space.
- Unplug TV's and VCRs, computers, monitors, printers, & scanners which are not in use for the summer.
- Unplug water coolers, leave one on for custodial staff.
- Limit turbo fan use to carpet drying only.

Thank you for helping to conserve our energy resources.



# Energy Tip

## ENERGY CONSERVATION

### CHECKLIST

- All thermostats will be automatically set at night set back.
- Make sure all heating vents and registers are unobstructed.
- Take anything (plants/animals) that requires warmth home with you.
- Turn off all lights in your areas, including any display or task lighting.
- Check the faucets in your classrooms, workrooms, and break rooms to make sure they are turned off tightly. Report any leaks to your head custodian.
- Make sure all windows and doors in your area are shut tight.
- Close your drapes and blinds. To help reduce heat loss, turn blinds so that the underside of the blade faces you.
- Turn off and unplug all nonessential electric appliances in classrooms.
- This is a good time to remove the non-curriculum refrigerators.
- Turn off all computers; be sure to shut off both the CPU and Monitor.

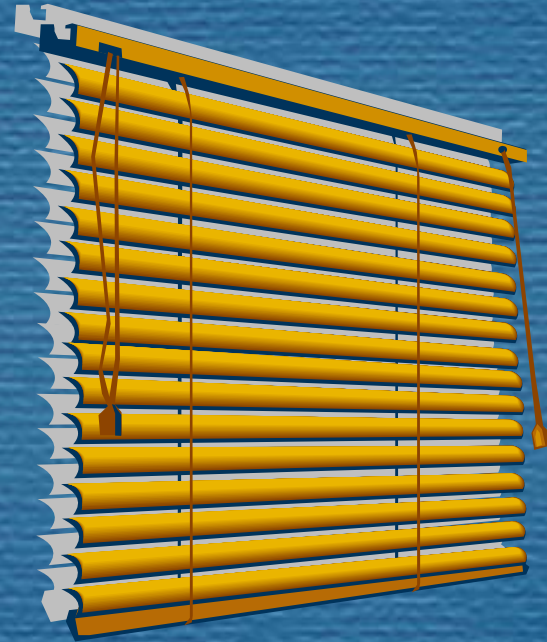
Thank you for helping to conserve our energy resources.

# Energy Tip

Sunlight can be a benefit to our district's energy consumption. How you operate your window blinds can help retain building temperatures.

**On cold days, turn window blinds downward.** This will allow you to use the winter sun for both lighting and heating. If the sun's rays can shine into your room, the amount of energy needed for heating can be reduced.

**On cold nights, turn blinds upward** before you leave. Since cold air falls and warm air rises, cold air will be trapped next to the window and warm air will remain in the room.



# Energy Tip



- Leaky faucets should be reported to your Head Custodian promptly. A steady drip of hot water can waste many gallons of water per month, plus the energy needed to heat the water.
- **Unblocking air flow can save up to 10% of heating/cooling costs.** Remove books, papers and other items off the top of unit ventilators. Be sure side and floor vents are also not blocked.
- Fact: The typical incandescent light bulb turns about 10 percent of its electricity into light.  
You may have notice that the typical light bulb, when on, is too hot to touch (please don't try it!!). 90 percent of the incandescent bulb's energy is wasted as heat, which means it isn't very energy-efficient. ENERGY STAR qualified lighting uses two-thirds less energy and generates 70% less heat than incandescent lighting



# Teaching Others

Learning about energy can begin at any age level. Today's students inhabit a rapidly changing world of increasing global interdependence. It is important that children have the knowledge and resources to become conscientious environmental citizens. Our future depends largely upon the wisdom and respect students have for nature and the choices they will make to protect it.

## 10 Reasons Why Teaching about Energy is Essential

1. Energy use affects us all—our pocketbooks, our environment, and even our national security. Many Americans don't realize that we're now importing more oil than we did during the oil crisis of the late 1970s. And the use of fossil fuels for energy contributes significantly to air pollution.
2. Educating the public, including students, about the economic and environmental costs of energy use is one of the best ways to help curb energy waste.
3. It's important for students to learn about their energy choices along with the advantages and disadvantages of each choice. For example, fossil fuels are convenient and readily available, but their supplies are finite and their use is environmentally damaging. Meanwhile, renewable energy sources are inexhaustible with many environmental benefits, but they aren't necessarily as convenient, readily available, nor able to meet all our nation's energy needs.
4. Chances are that most students have never seen a solar car or a modern, working wind machine. The good news is that interest in the development of renewable energy sources is spreading rapidly once again. Today, as a result of the 2000 California energy crisis and growing concern over global warming, national security and the health effects of poor air quality, renewable energy is gaining the attention of the general public as well as our state and national governments.

Thank you for helping to conserve our energy resources.

# Teaching Others

5. Helping students understand all aspects of a particular energy source-its availability, benefits, and monetary, environmental, and social costs-will help them make informed decisions about energy at home and at work.
6. Students who can make energy smart decisions will be more conscientious about wasting energy in their lifetimes. They can learn that preventing energy loss is often very simple, can save money, and in many cases, can benefit the environment by reducing pollution and conserving our natural resources.
7. Implementing energy efficient lesson plans at an early stage of a child development will provide long term benefits such a increase awareness and lower energy usage over time.
8. Studying energy is an excellent way to introduce students to science concepts and processes included in the National Science Education Standards.
9. Enables teachers to learn about the energy efficient innovations and integrate news about new emerging technologies into their curriculum.
10. The study of the efficient use of energy has not yet received the recognition that it deserves in school science. New approaches, that are readily digestible by students is needed to ensure they are kept interested and fully engaged to learn more about energy efficiency solutions.

Thank you for helping to conserve our energy resources.

# Energy Tip

## Tie energy conservation practices with student learning.

### Lighting

1. Turn off lights when not in use- lighting accounts for nearly 25% to 30% of the electric bill in most schools. There's no reason to leave light on if a room is empty. It takes 5 seconds to save energy when flipping a switch off.
  - Form a student energy patrol to ensure lights are out when rooms are empty (check classrooms, the cafeteria, the auditorium etc.)
  - Have students make signs and stickers to remind people to turn off the lights when they leave a room.
2. Use energy efficient compact fluorescent light bulbs (CFLs) for desk lamps.
  - Have students calculate the energy saving achieved by replacing incandescent light bulbs with CFLs.



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# Vending Machines



Turn off vending machine lights or request the vending company install more efficient T-8 fluorescent lamps. Lighting accounts for one third of the total power consumption in a typical vending machine. A typical vending machine consumes about 3,000 kWh per year; four times that of a residential refrigerator.

**Energy cost savings= approximately \$33,000 annually.**

- Install “smart controls” or sometimes called “vending misers”. These will reduce energy waste without posing a risk to the products’ ideal temperature and environment. These will reduce annual energy use by 1,800 kWh. The controls can “sense” when a product is needed and not waste energy consumed during long stand-by periods.
- Saving energy in vending machines can be achieved by both the purchase/rental of new efficient models or by retrofitting existing models with “smart controls.” Specify energy efficient machines in your beverage agreements.



# Energy Tip: Lighting

- According to the United States Environmental Protection Agency (EPA), 25 to 30 percent of a building's energy use goes toward interior and exterior building lighting. As with most energy using pieces of equipment, the most effective way to reduce energy consumed by lights is to shut them off. Fortunately, turning off lights is one of the easiest conservation habits to form and it only takes seconds to carry out.

Over the years, several myths have developed regarding the proper operation of lighting, in particular, the operation of fluorescent lighting.

*Myth: You shouldn't turn fluorescent lights off because it uses more energy to turn them back on again.*

- **FACT: The energy usage during start up is comparable to 5 seconds or less at normal operation. Therefore, turning the light off for more than 5 seconds will save more energy than leaving them on. Lights should always be turned off when a room is vacated.**



# Energy Tip

The average home spends about \$1,900 annually on energy bills. Heating and cooling accounts for as much as half of a home's energy use.

Whether you're replacing heating and cooling equipment in your home or planning the installation of equipment in a new home, choosing ENERGY STAR® qualified products can help keep your home comfortable year-round and contribute to a cleaner environment

## **CFL's**

ENERGY STAR qualified CFLs use 66% less energy than a standard incandescent bulb and last up to 10 times longer. Replacing a 100-watt incandescent with a 32-watt CFL can save you at least \$30 in energy costs over the life of the bulb.

If every household in the U.S. replaced one light bulb with an ENERGY STAR qualified compact fluorescent light bulb (CFL), it would prevent enough pollution to equal removing one million cars from the road.

Thank you for helping to conserve our energy resources.

# Energy Tip

**Replace incandescent lamps with compact fluorescent lamps.** Modern incandescent light bulbs (lamps) derive from Thomas Edison's work before the turn of the 20th Century- over 100 years ago! Of the electricity consumed by an incandescent lamp, less than five percent is actually turned into useful light. Although incandescent lamps are appropriate for certain low-use areas such as closets, in most applications incandescent lamps should be replaced with compact fluorescent lamps. Compact fluorescent lamps are miniature versions of standard fluorescent lamps. They are 4 times as efficient as incandescent and last 10 times as long.

Note: "Energy Saver" incandescent lamps aren't much more efficient than regular incandescent lamps. They save you money just by delivering less light. This is not the best solution.

If you have incandescent lamps:

25 watts  
40 watts  
60 watts  
75 watts  
100 watts

replace them with these compact fluorescent lamps:

5 watts  
7 watts  
13 watts  
22 watts  
27 watts

Thank you for helping to conserve our energy resources.

# Did you know



- For each degree you lower the temperature in your home or at work, you can cut your winter heating bills by 4%, depending on how many hours a day you turn down the heat. An ENERGY STAR programmable thermostat can make this easy- it “remembers for you” to adjust the temperature according to your daily patterns so you don’t waste heat on an unoccupied space. It’s actually the 100th anniversary of the programmable thermostat, which predates the Model T Ford, the lawnmower and the eight-track tape.
- Reducing electricity consumption eliminates greenhouse gas emissions from utilities. The environmental effect of turning lights and computers off is the same as carpooling and planting trees.
- ***This day in history:*** January 27, 1880 Thomas Edison patented the first incandescent light bulb. 125 years later incandescent bulbs are still in use.  
***Today’s choice of bulbs: Energy Star Qualified Compact Fluorescent Light Bulbs (CFLs)***  
Why? Because CFLs:
  - Save at least \$25 each over their lifetime in energy costs
  - Last at least 6 times longer than incandescent bulbs
  - Use 2/3 less energy
  - Are convenient in hard-to-reach or high-use fixtures
  - Perform with advanced technology
  - Can be used in most incandescent fixtures
  - Offer bright, warm light
- In the U.S. alone, the amount of energy consumed by home electronic when **not** in use equals the annual output of **SIX** power plants.\* Imagine what schools contribute beyond this.



Thank you for helping to conserve our energy resources.



# *My room is too hot- what do I do?*

- If a room is uncomfortable, please notify your head custodian.
- You should never need to open a door or window in order to adjust the temperature in your room.
- Opening a door or window makes the HVAC system work harder to maintain temperature set points. When a door or window is left open, conditioned air blows out of the HVAC unit and goes right out the window or door. Or the colder hallway air comes into the classroom. When this happens, the thermostat continues to “think” that the room still needs to be heated. So not only do you remain uncomfortable, you waste energy too.
- Typically the system’s fan will need to remain on in order to supply fresh air. So turning the fan off, just adds to your discomfort.

Thank you for helping to conserve our energy resources.

# No- and Low-Cost Strategies That Save Dollars



**1. Reduce hot-water temperature.** Turning down the temperature on water-heater thermostats can decrease heat loss from tanks. In terms of the water used for hand-washing in restrooms, you may be able to turn the temperature down to 110 degrees F. Other tasks (such as washing dishes and cleaning/maintenance duties) may require slightly higher temperature settings (around 130 degrees F.).

**2. Turn the thermostat up in the summer and down in the winter.** For each degree you raise on your building's thermostat during warmer weather, you can save up to as much as 2 percent of your total air-conditioning costs. If all businesses in California would set their thermostats to a slightly higher temperature setting in the summertime, the state would save 770 megawatts for every 2-degree increase. When space is unoccupied (on nights, weekends, and holidays), set the thermostat at 85 degrees F.; during normal business hours, bump the thermostat up to 78 degrees F. and implement a dress code for warmer weather that will allow employees to wear more comfortable clothing during hot weather (it doesn't make much sense to cool an office just so tenants/occupants can wear suit jackets or coats). Set the thermostat to 68 degrees F. during the colder months of the year, and keep settings at 63 degrees F. during weekends, holidays, and evenings.

# No- and Low-Cost Strategies That Save Dollars

**3. Install ENERGY STAR® ceiling fans.** The air movement from ceiling fans can cool a room by up to 4 degrees F. in warmer weather, which will allow you to set your thermostat even higher. Ceiling fans can also help in cooler weather: When air is heated, it becomes less dense and rises. As a result, warm air becomes trapped at ceiling level; installing ceiling fans to push warm air downward can significantly reduce heating bills.

**4. Clean lighting fixtures and replace yellowed or hazy lenses and diffusers.** Lamps, fixtures, reflectors, and diffusers should be cleaned regularly; dirt and dust can impinge upon lighting-equipment effectiveness and, as a result, the fixtures transmit less light, decreasing lighting efficiency.



# No- and Low-Cost Strategies That Save Dollars

**5. Adjust janitorial cleaning schedules to reduce lighting and equipment use.** Shifting cleaning and maintenance schedules so that they occur during normal operating hours can reduce overall energy costs. If the custodial staff is working when tenants and occupants are using the space, they won't have to turn on lights, adjust thermostats, or turn on/off equipment that isn't normally used after 5 p.m.

**6. Choose top-freezer models for cafeteria refrigerators.** Side-by-side refrigerators use approximately 10- to 25-percent more energy than traditional top-freezer models. Place company refrigerators and freezers away from heat sources such as commercial ovens and dishwashers, heating vents, or direct sunlight. Clean the refrigerators' condenser coils, motors, and evaporator pans once or twice each year.

Thank you for helping to conserve our energy resources.





# No- and Low-Cost Strategies That Save Dollars

**7. Choose electronic products and appliances without a built-in clock or timer.** These displays may only consume about 0.5 watts, but the power supply in the appliance is converting 120 volts of alternating current to low-voltage direct current for the clock or timer. Consuming 20 to 1,000 watts per hour each day, this is enough to power a compact fluorescent lamp for 10 hours.

**8. Invest in “smart” power strips.** These power strips can sense the presence or absence of tenants/occupants and turn the attached equipment on or off accordingly. Plug all computer scanners, printers, copiers, etc. into these strips; they’ll take responsibility away from tenants and occupants (or the building management staff) in terms of remembering to shut down equipment each evening.

Thank you for helping to conserve our energy resources.



# Electronics & Office Energy Saving Ideas:

**No Cost-** To turn off computer scanners, printers, and other devices that are plugged into a power strip, simply switch off the power strip after shutting down your computer.

**Good Investment-** Choose products and appliances without a built-in clock or timer. The displays only consume about  $\frac{1}{2}$  watt, but the power supply in the appliance is converting 120 volts of alternating current to low-voltage direct current for the clock or timer. This is very inefficient and consumes 20 to 100 Watts/hour per day. This is enough to run a compact fluorescent lamp (CFL) continuously for 10 hours.

**\*\* Turning off a computer monitor @ night and on weekends can save more than \$50.00 per year per monitor. \*\***

**If a monitor is not physically turned off at the switch, it will continue to consume energy. Please remember to “click the button off”, if the light is on the monitor is still on.**

Thank you for helping to conserve our energy resources.

# Energy Tip

- All unoccupied spaces must have lights turned off; this includes lamps and decorative lighting.
- Staff can be “energy buddies” for each other; turning lights off in unoccupied rooms, even if it’s not their room.
- Instructors could use only ½ of their lights during planning time.
- Gym and cafeteria lights are to be off if space is not in use.
- Ensure that occupancy sensors are not blocked.
- As a reminder I have attached the temperature guidelines for district buildings. Please share this information with your staff. Heating problems are to be directed to the Head Custodian, if he/she are unable to resolve, they are to complete a work order and have custodian contact Facilities.

Thank you for helping to conserve our energy resources.



# Energy Tips

## Turn it off or turn it down when not in use.

Common sense says lights, air conditioners and heating units should be turned off or down when a building is not in use. But, getting everyone to do their part is sometimes easier said than done. And, there are some innocuous-looking pieces of equipment that use energy that you may not think about, like soft drink machines and computer monitors.

**MYTH:** There is a myth that frequently turning fluorescent lights on and off can cause premature failure of the bulbs and end up costing the school district more for bulbs, labor, etc. The misconception is that an electrical surge occurs when fluorescent lights are switched on, and that this surge consumes much more energy than could ever be saved by turning out the lights.

**FACT:** The electrical surge is extremely short and insignificant. The wear on the light bulbs is far outweighed by energy savings when the lights are turned off.

Thank you for helping to conserve our energy resources.



# Computer, Screen Savers, & Monitors



- Screen savers prevent screen damage and may provide entertainment. But, while those flying toasters or wacky designs are displayed on your screen, your computer is accessing the CPU and maybe the hard drive, which causes your computer to use energy just as if you were working on a document. Even screen savers that make the screen go blank don't significantly lower energy use.
- The best way to save your screen and save energy at the same time is to turn off your computer when you are not using it. If you will be away for 30 minutes or more, turn everything off – the monitor and the CPU.
- The second best way to save your screen and save energy is to turn off your monitor (while leaving the CPU on) if you will be away 15 minutes or more. Your monitor uses the most energy and simply switching it off when not in use will cut your energy use. The CPU will continue to use energy but this is a good compromise. There are even hardware devices that detect keyboard inactivity and automatically cut power to the monitor until someone touches the keyboard.
- There is a third way to save energy and your monitor's screen at the same time. Every computer user should be using this method regardless of whether they are doing the first two. Use the power management features of your computer. Unless your computer is very old, you will have some options for power management (PM). Power management uses software loaded in your computer to cut power to the monitor and make your computer "sleep."
- If you follow these simple guidelines, the Department of Energy claims that your screen and your whole system will last longer.

Thank you for helping to conserve our energy resources.



# The importance of energy efficiency:

- Hurricane season triggers mini energy crisis
- Energy Costs continue to increase – Americans now spend over \$700 billion on energy
- Energy demand expected to climb 40% by 2025
- 85% of US Carbon Emissions stem from electricity generation and use.
- GHG emissions expected to climb as much as 60% by 2025
- 50% of projected national energy use and CO<sub>2</sub> emissions within the next 10 years will be from use of equipment

Thank you for helping to conserve our energy resources.



# Energy

- Please keep in mind that it is impossible to maintain a single temperature. For instance, don't call for repair if the temperature is 67 degrees in a high school classroom or office. Temperatures are measure three feet from the floor and three feet from a wall.
- Turn off lights when you leave a room, including any lamps in the room. Lamps with incandescent light bulbs are very inefficient. Help each other save energy by turning off lights in unoccupied spaces.
- A typical school classroom has 14-2 lamp light fixtures.
- If the lights in this classroom are left on for an extra 2 hour per day; the added cost is approximately \$18.00 per year.
- Take this to your own building:
  - Elementary- Average 25 classrooms= \$450.00 per year
  - Intermediate- Average 40 classrooms= \$720.00 per year
  - High School- Average 60 classrooms= \$1,080.00 per year
  - District Wide- Over \$15,000 of added cost or potential savings.
- Turn off lights in closets and storage areas
- Custodians should light rooms as they are cleaned, turning off lights when completed in each room.
- These are only a few ideas to get you started; I know you have many of your own. We will be sharing more tips and ideas as well as district costs/consumption information with you on a regular basis. Please feel free to contact me is you have any questions, concerns or ideas that you would like to share with others.

Thank you for helping to conserve our energy resources.



# Energy

DMPS temperature guidelines for our buildings:

- Classrooms-
  - Preschool and Kindergarten= 72-74 degrees
  - 1st grade through 5th grade= 70-72 degrees
  - 6th grade through 12th grade= 68-70 degrees
- Offices- 68 degrees
- Hallways- 65 degrees (maximum)
- Unoccupied temperature - in night set back (nights, weekends, holidays)

Thank you for helping to conserve our energy resources.





# Quiz Time

- 1) When a ceiling fan is spinning on high speed and everyone walks out, how many degrees cooler does the room remain?
- a. 0 degrees F
  - b. 5 degrees F
  - c. 10 degrees F

**The answer is 0 degrees F**

- 2) How much money can you expect to save every year in energy costs by replacing 5 of your highest-use fixtures (or the incandescent light bulbs in them) with high efficiency lighting?
- a. Less than \$20
  - b. \$32.50
  - c. More than \$60

**The answer is: More than \$60.**



# Quiz Time

- 3) The typical incandescent light bulb turns about \_\_\_\_\_ percent of its electricity into light that illuminates your way to the refrigerator when going for a midnight snack.
- a. 90
  - b. 50
  - c. 10

The correct answer is: 10%

- 4) Over its lifetime of about 4 years\*, the energy saved by an ENERGY STAR qualified compact fluorescent light bulb (CFL) in your home is equivalent to which of the following?

\* Based on an average of 4 hours of use per day

- a. Drinking one protein shake
- b. Preventing 500 pounds of greenhouse gases from entering the atmosphere, equivalent to 350 - pounds of coal being burned
- c. Driving your car to the grocery store
- d. A lightning bolt

The correct answer is:

Preventing 500 pounds of greenhouse gases from entering the atmosphere, equivalent to 350 pounds of coal being burned.

Thank you for helping to conserve our energy resources.



# Quiz Time

- 5) Switching to fluorescent lighting can save consumers a lot of money. How much money could Americans save collectively each year if we all made the switch to efficient lighting?
- a. \$500,000
  - b. \$ 1 million
  - c. \$750 million

Answer: \$750 million

Switching your incandescent light bulbs to compact fluorescents is a good thing.