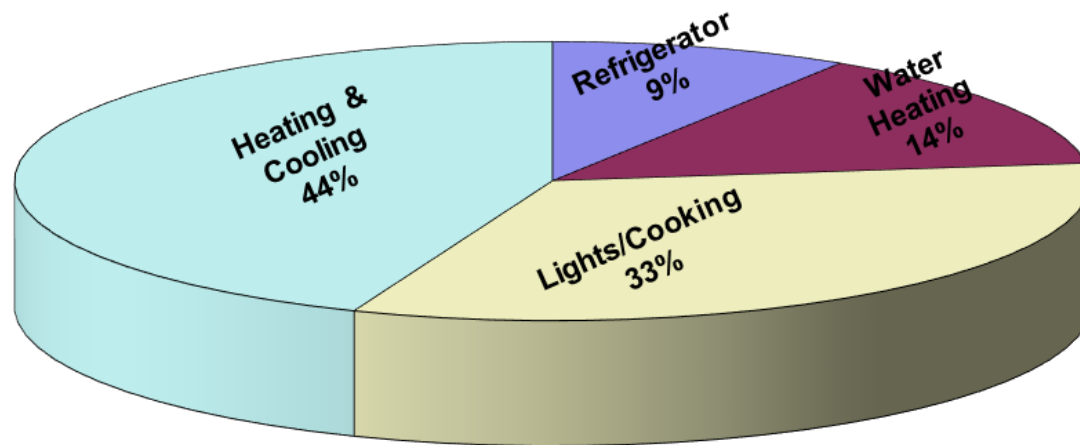
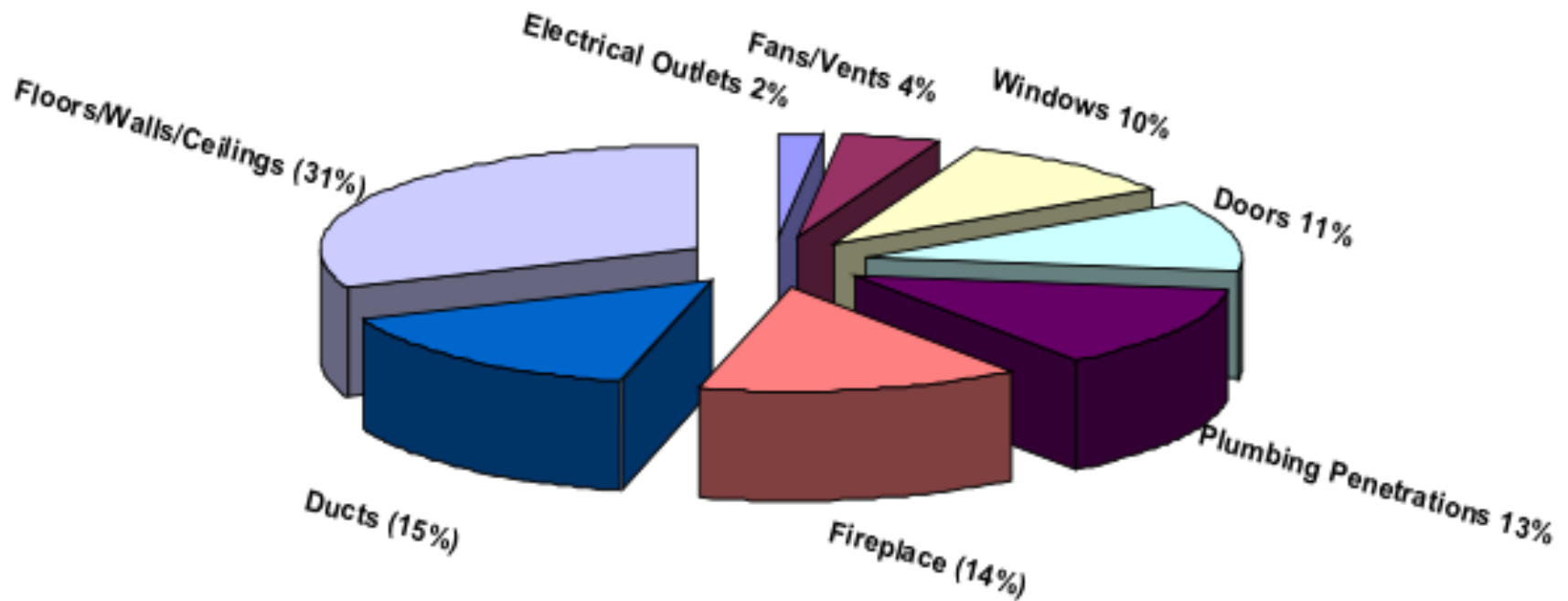


# How Do We Use Energy In Our Homes?



# Where Does The Heat Go?



# Ways You Can Reduce Heat Loss

- **Secure attic hatch and air seal.** You can reduce heat loss by up to **20%** by insulating the basement, attic and crawl spaces.
- **Fireplace**
  - Keep the damper closed when not in use.
  - Add glass doors to the face of the fireplace, then close them to keep in heat once the fire has died down.
  - Buy “seasoned” wood. That means wood that has been allowed to dry out. Freshly cut wood has too much moisture to burn well.

## \*\*\*\*SAFETY TIPS\*\*\*\*

Keep a fire extinguisher within reach of the fireplace and flammable items at least three feet away. Call a chimney sweep for an inspection—and make all repairs before using each year.

# Ways You Can Reduce Heat Loss

- **Upgrade inefficient windows and doors.**
  - *Windows*
    - » Replace or seal broken glass. Use clear tape over crack or use window kits.
    - » Use caulking, weather stripping or storm panels.
  - *Doors*
    - » Weather-strip whole perimeter to ensure a tight seal.
    - » Use door sweeps.
- **Fix leaks.**
  - Take temperature in each room to determine where major leaks are!!
  - Start with leaks on West or North side (windward side) of house.
- **Programmable Thermostat** can control the heat when you are not at home.
- **Seal plumbing penetrations.** (Make sure to use a foam sealant)

# Tips for Your Furnace and Heating Your Home

- **Change furnace filters monthly.** Furnace works harder if filters are dirty.
- **Clean the area around your furnace.** Removing trash and anything that can catch fire will keep your family safe. It can also improve the air flow to your furnace.
- **Clean furnace and ducts.**
  - Hire professionals to inspect and tune your furnace yearly.
- **Keep air registers and vents clear** to allow air flow freely throughout the room.



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- **Lower thermostat to 68 degrees.** Turning your thermostat back 5 degrees can save as much as **\$25** a month.
  - **Bulk fuel users can lower thermostat to 60 degrees at night.** Furnace will not kick on, so you will save money.
  - **Keep curtains open during daytime and close curtains at night.**
  - If you get cold: **put on a polypropylene fleece sweater and wool socks.** Cotton absorbs, so not a good idea to wear.



# Tips for you're A/C and Cooling Your Home

- **Raise thermostat to 78 degrees.** You can save 15% on cooling costs.
- **Keep curtains closed.**
- **Install insulating curtains or drapes.**
- **Use ceiling fans to help circulate air.**
- **Planting trees and shrubs** around your house will provide shade, but also help with cooling of your home. A/C won't kick on as much with the shade.
- Purchase an **air conditioner that is the proper size** for the area you are cooling.
- **Place A/C on North, East or best-shaded side of home.** Direct sunlight makes A/C work Harder.
- **In Winter, take A/C out of window** or insulate by using tight-fitting A/C unit cover.
- **Clean Filters** once a month.



# Appliances and Lighting



- **Turn off** lights, computers, televisions and radios when not in use.
  - **Unplug** any unused appliances. (Live current is continuously running)
  - **Keep lamps and appliances away from the air-conditioning thermostat.** Thermostat senses heat which will make A/C run longer and harder.
  - When buying new appliances look for an **Energy Star rating**. It will cost less to operate than an appliance without the star.
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- **Replace incandescent bulbs with Compact Fluorescent Bulbs (CFLs).**

- CFL lasts **10 times** longer – about 10,000 hours.
- CFL costs \$2.50 a year in electricity – regular bulb costs \$10.50/year.
- CFL gives off less heat and keep the house cooler in summer.
- 1-18 watt CFL lasts the same # hours as 10-75 watt regular bulbs.
- Replacing regular bulbs that are on at least 15 minutes at a time and used 3 hours a day with an CFL can cut lighting costs up to **75%**.
- **Install motion sensors or timers.**





# Tips for Cooking

- **Use microwaves, toaster ovens and crock pots instead of regular oven.**
  - Microwaves use **70-80%** less electric than an oven.
  - Toaster ovens use **1/3 – 1/2** as much energy as an oven.
- **Don't preheat oven.**
- **Cook more than one dish** in oven at once.
- **Keep oven door closed.** Use your oven light. Peeking can lower the temperature in the oven by **25 degrees**.
- **Do not put foil on oven shelves.** It blocks heat and drives up heating costs.
- **Use proper size burners.** Using an 6" pot on a 8" burner wastes over 40% of burner heat.
- **Keep lids on pots & pans** to keep in heat. You will use 1/3 as much energy as cooking without a lid. It also reduces cooking time.
- **Use pressure-cooker** for stove top cooking. It builds up steam which in turn cooks at a higher temperature resulting in less cooking time.





# Tips for Your Fridge and Freezer

- **Refrigerator Temperature- 36-38 degrees.** To test the temperature, place a thermometer in a glass of water in center of refrigerator. Read after 24 hours.
- **Freezer Temperature- 0-5 degrees.** To test the temperature, place thermometer between two frozen packages. Read after 24 hours.
- **Keep freezer full.**
- **Don't cover air openings.**
- **Cover liquids and wrap foods** stored in refrigerator. Uncovered foods release moisture and makes the compressor work harder.
- **Defrost freezer** regularly. Frost makes refrigerators less efficient and helps spoil foods.
- **Test your fridge's seal.** Close refrigerator door over a piece of paper or dollar bill. If it pulls out easily, the door latch may need adjusting, or the seal may need replacing.
- **Keep seal clean.**
- **Close refrigerator door quickly.** The interior temperature of the refrigerator can increase by **10 degrees** each time you open the door.

# Tips for Using Water

- Save water by **scraping dishes** instead of rinsing.
  - **Run full loads** at a time.
  - **Use air dry cycle** or open door and let dishes dry naturally.
  - Hand washing requires hot water. **Save energy by using dishwasher.** Rinse dishes in groups rather than one at a time. Don't leave the water running. Don't wash a few dishes – wait until you have a full sink.
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- The water heater is the second biggest energy user in the home. **Set thermostat to 120 degrees.**
  - Higher than 120 degrees you can burn yourself.
  - Water heater will last longer (less de-mineralizing).
- A family of four, each showering for 5 minutes a day, uses 700 gallons of water a week. Just heating the water can cost up to \$33 a month.



# Tips for Your Clothes Washer and Dryer

- Dos for the Dryer

- Clean dryer vent to prevent fire and so dryer runs more efficiently.
- Clean lint trap. Lint buildup blocks air flow & lengthens drying time.
- Use hard pipe instead of flexible pipe.
- Dry clothes outside in good weather; sunlight & free.
- Dry several loads of laundry in a row; using the heat already there saves money.



- Don'ts for the Dryer

- Don't run vent under house.
- Don't overload. Overloading uses excess energy because the items take longer to dry.



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- Almost 85% of the energy used for washing clothes goes to heat water. Wash clothes in cold water instead of hot or warm. Clothes get just as clean and you cut your energy load in half.
  - Wash full loads of laundry only



# Tips for the Bathroom

- **Check for leaks in toilet.** A leaky toilet flapper with 1 drip/second adds up to **1825 gallons/year**.
- Toilets account for almost **30%** of indoor water use.
- Fix any leaky faucet. If it has 1 drip/second, that adds up to 2700 gallons/year.
- **Don't leave water running** when brushing teeth or shaving.
- **Use low flow showerheads.** It can save **\$2/month** for each person in your household.
- **Use faucet aerators** in bathroom and kitchen.
- **Take 5-10 minute showers.** Showers use about half as much hot water as a full bathtub.
- **Turn off ventilating fans** in bathroom and kitchen as soon as they have done their job. Leaving one on can clear out a household of warmed or cooled air in about 1 hour.

