

Skills for Living

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Topic 25-4

Conserving Energy in the Home

- In this topic, you will learn about using energy wisely, as well as
 - ❖ **Energy sources**
 - ❖ **You can help conserve energy**

Conserving Energy in the Home

Objectives for Topic 25-4

After studying this topic, you will be able to

- identify renewable and nonrenewable energy resources
- discuss ways you can help conserve energy at home

Topic 25-4 Terms

❖ solar energy

❖ biomass

❖ wattage

❖ lumens

Energy Sources

- *Energy* gives a machine the power to perform an action
- There are two major sources of energy
 - ❖ nonrenewable
 - ❖ renewable

Nonrenewable Energy Sources

- The earth's supply of nonrenewable resources is limited
 - ❖ crude oil
 - ❖ natural gas
 - ❖ coal
 - ❖ uranium ore

Renewable Energy Sources

- Renewable energy sources are derived from sources that can be replaced
 - ❖ water
 - ❖ wind
 - ❖ *solar energy*, or energy produced from the sun
 - ❖ *biomass*, or plant and animal matter that provides energy when burned
 - ❖ *geothermal energy*, which is derived from heat produced within the earth

Outlook for the Future

- Oil and natural gas supplies are being depleted
- Coal is abundant, but it can cause air pollution
- Renewable sources currently account for only 6 percent of U.S. energy
 - ❖ Greater investment in research and development is needed to make renewable energy sources more available and affordable

You Can Help Conserve Energy

- Reduce the use of fossil fuels
- Learn how to use appliances efficiently

Heating and Cooling at Home

- Use a programmable thermostat to regulate temperatures
- Seal air leaks
- Use appropriate window coverings
- Add insulation, if needed
- Use storm windows or install double-pane windows

Water Heating

- Take quick showers instead of baths
- Use aerating showerheads
- Run the dishwasher and clothes washer only when loads are full
- Use cooler water

Lighting and Appliances

- Use the lowest wattage lightbulbs that will give adequate light for your needs
 - ❖ *Wattage* indicates the amount of energy required to operate a bulb
 - ❖ *Lumens* indicate the amount of light produced by a given source

Lighting and Appliances

- Learn to use kitchen and laundry appliances efficiently to help conserve energy
 - ❖ Do not leave refrigerator or freezer doors open for long periods of time
 - ❖ When cooking on a range, match the size of the pan to the heating element
 - ❖ When using the oven, cook several dishes at the same time
 - ❖ When washing clothes, adjust the water level to match the size of the load

Lighting and Appliances

- *Home electronics* refers to televisions, audio systems, video recorders, and all the equipment that links to them
 - ❖ 75% of the energy used by home electronics occurs while the items are turned off
 - ❖ Unplug home electronics or plug them into a power strip that is turned off

Shopping for Energy Efficiency

- *EnergyGuide labels* help you compare the operating costs of major appliances
- *Energy Star labels* identify the appliances and other consumer products that use the least energy

Summary for Topic 25-4

- Conserving energy is another aspect of home care, as well as a global necessity
- Every person must be willing to do his or her part, starting at home
- Having a knowledge of conservation issues helps people make energy saving practices an everyday habit
- By using renewable resources efficiently, people save natural resources and money