

G-W Goodheart-Willcox Publisher

Succeeding in Life and Career

Frances Baynor Parnell

Tenth Edition



Presentations for PowerPoint

Succeeding in Life and Career

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G-W
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Chapter 5

Community and Environmental Responsibilities

Section 5-1

Citizenship

Objectives

- Explain the importance of being an informed citizen and exercising your right to vote.
- Describe the purpose of taxes.
- Consider why community involvement is important to individuals, especially teens.

To Be Informed

- As a citizen, you have rights and responsibilities



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continued

To Be Informed

- You have the responsibility
 - to be informed
 - to vote
 - to obey the law
 - to pay taxes
 - to be involved in your community

continued

To Be Informed

- Your right: To receive information about the world around you
- Your responsibility: To use the information to be an informed citizen

To Vote

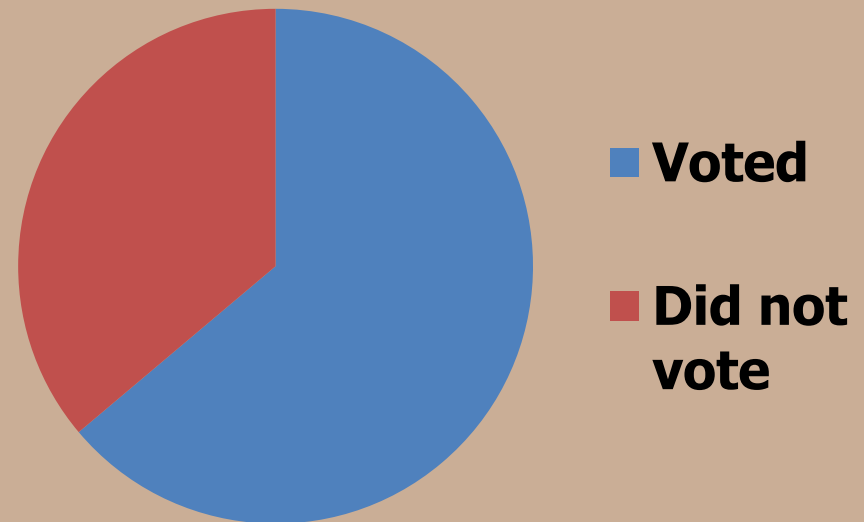
- Your right: To help choose your government leaders
- Your responsibility: To become informed on the issues and the candidates' views
- If you are at least 18 years old and a U.S. citizen, you may register to vote



Did You Know?

- In the 2008 U.S. election,
 - 206 million people were eligible to vote
 - 146 million people registered to vote
 - 131 million people voted

U.S. Citizens Eligible to Vote in 2008 Election



To Obey the Law

- Life would be chaos without laws
- Your right: To enjoy the benefits that laws provide
- Your responsibility: To obey laws that govern your behavior

To Pay Taxes

- Federal, state, and local governments collect taxes
- Your right: To benefit from the services provided by tax dollars
- Your responsibility: To pay taxes



Think Further



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➤ *What are the tax dollars collected by the government used for?*

To Be Involved in Your Community

- Volunteers provide their time, talents, and energy free of charge
- Your right: To benefit from public services and nonprofit agencies
- Your responsibility: To become involved in the community by volunteering

continued

To Be Involved in Your Community

- Benefits of volunteering include
 - learning more about your community
 - feeling good about making a contribution
 - perfecting skills and learning new ones
 - determining career interests
 - gaining experience and making job contacts

To Protect the Environment

- Your right: To live in a clean, healthy environment
- Your responsibility: To help keep your environment clean and healthy



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Section 5-1 Review

- Why do you need to be informed about factors that impact the economy?
 - *they can limit your ability to find a job and purchase goods and services*
- *True or false.* Voting is a right enjoyed by citizens in every country.
 - *false—people in many nations do not have the right to vote*

continued

Section 5-1 Review

- List goods and services you use everyday that are funded by tax dollars.

➤ *Answers will vary.*

- You are a citizen of a city, state, nation, and _____.

➤ *world*

Section 5-2

Caring for the Environment

Objectives

- Explain the importance of a healthful environment.
- Identify the causes of different types of pollution.
- Relate how pollution affects people's health.
- Discuss ways people can protect and build a healthful environment.

A Healthful Environment



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- *A healthful environment*
 - promotes good physical and mental health
 - enables people to reach their goals

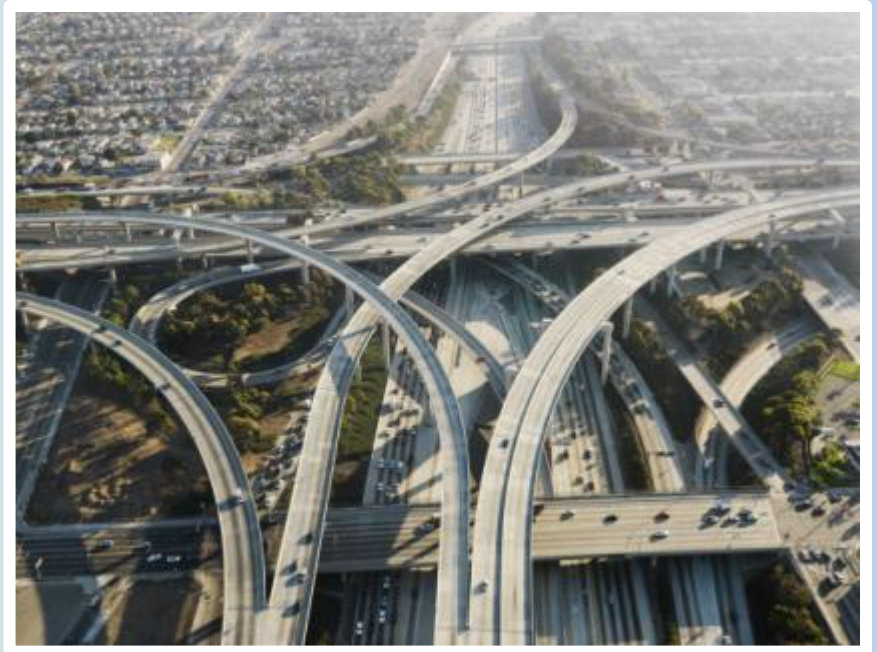
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A Healthful Environment

- Healthful environment characteristics
 - clean air
 - unpolluted water
 - rich soil
 - a continuing supply of natural resources
 - surroundings that provide privacy and recreation and support plants and animals

Factors Affecting the Environment

- Two factors that play a role in the increase in environmental problems are
 - rapid population growth
 - shrinking natural resources



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Rapid Population Growth

- As the human population increases,
 - available living space for each person decreases
 - existing resources must be divided among more people
 - more waste is created

Shrinking Natural Resources

- *Renewable resources* are replaced rapidly enough to provide a continuing supply
 - plants
 - animals
 - energy from the sun and wind
 - water

continued

Shrinking Natural Resources

- *Nonrenewable resources* are replaced very slowly and the supply is limited
 - **fossil fuels**, or oil, coal, and natural gas
 - minerals such as copper and gold

Pollution

- **Pollution**, caused by *pollutants*, is all the harmful changes in the environment caused by human activities



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Air Pollution

- Pollutants can build up over time in the air
- Air pollution is linked to respiratory ailments
- The burning of fossil fuels creates airborne pollutants

continued

Air Pollution

- Chemical pollutants weaken the ozone layer which allows more solar radiation to reach the earth
- Electrical power plant and motor vehicle emissions can create *acid rain*, which can damage the environment, buildings, and other structures

Water Pollution

- *Water pollution* is the accidental or careless addition of waste materials to
 - rivers
 - lakes
 - oceans
 - underground water supplies

continued

Water Pollution



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- Industrial wastes, sewage, and agricultural chemicals are the main causes of water pollution

Noise Pollution

- *Noise pollution* is the excessive level of noise to which people are subject
- Noise pollution can lead to hearing loss

Hazardous Waste

- Hazardous waste may
 - ignite
 - corrode
 - chemically react with another material



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continued

Hazardous Waste

- Toxic waste can cause injury if
 - inhaled
 - swallowed
 - absorbed through the skin

How You Can Help



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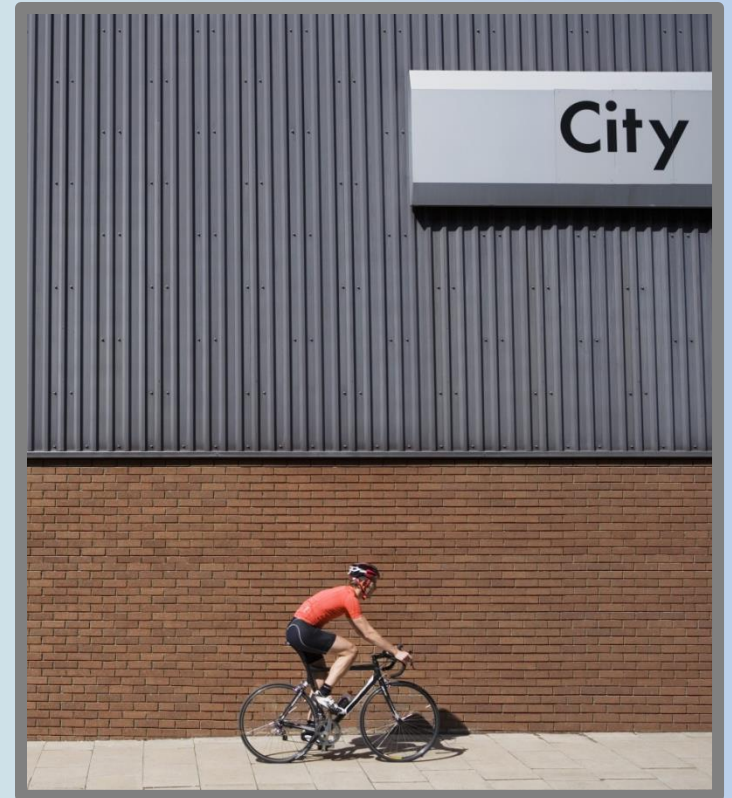
- Individuals play an important role in preserving and protecting the environment

Conserve Resources

- To conserve resources, recycle
 - aluminum cans
 - glass and plastic bottles
 - paper
 - furniture
 - appliances
 - clothing

Reduce Pollution

- To reduce air pollution,
 - walk, ride a bike, or take public transportation, instead of driving
 - combine errands or carpool



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continued

Reduce Pollution

- To reduce water pollution,
 - avoid dumping waste on the ground or into bodies of water
 - choose nontoxic cleaning agents and biodegradable detergents

continued

Reduce Pollution

- To reduce noise pollution
 - insulate your home from noise pollution
 - protect your hearing by wearing ear protectors

continued

Reduce Pollution

- Reduce, reuse, recycle
- Insist that your community use safe practices
- Join community groups
- Write your legislators



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Make Responsible Decisions

- Fully evaluate your choices to the best of your ability
- Seek out environmental information from reputable sources, such as the U.S. Environmental Protection Agency



Did You Know?



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- In 2009, Americans discarded 2.37 million tons of e-waste, including TVs, computers, and cell phones.

Source: U.S. Environmental Protection Agency

Section 5-2 Review

- What is the source of fossil fuels?
 - *decayed plants and animals that lived long ago*
- Give examples of toxic waste.
 - *Answers will vary, but may include used motor oil, antifreeze, certain batteries, empty pesticide containers, solvents*

continued

Section 5-2 Review

- List two ways you can minimize product-packaging waste.
 - *(List two:) choose products with minimal or no packaging, reuse empty containers, use rechargeable batteries, recycle*

Section 5-3

Conserving Energy

Objectives

- Identify renewable and nonrenewable energy sources.
- Discuss ways you can help conserve energy at home.

Nonrenewable Energy Sources

- Caring for the environment involves using energy wisely
- *Energy* is something that gives a machine the power to perform an action
- Light, heat, and electrical are types of energy

continued

Nonrenewable Energy Sources

- People supplement their own physical energy with energy from other sources
- Two major sources of energy
 - nonrenewable (limited supply)
 - renewable



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continued

Nonrenewable Energy Sources

- Once a nonrenewable energy source is depleted, no further supplies are available
- They include
 - fossil fuels
 - crude oil
 - natural gas
 - coal
 - uranium ore

Renewable Energy Sources

- Sources of energy that can be replaced are called *renewable* energy sources
- They include
 - water
 - wind
 - solar
 - biomass
 - geothermal

Water



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- The energy of falling water can be converted into electrical energy called *hydroelectric energy*

continued

Water

- Through the cycle of water evaporation and rain, the supply of water is replaced
- Most power-generating sites in the U.S. have already been developed

Wind Energy



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- Wind turbines can convert the energy of the wind into electrical energy

continued

Wind Energy

- Wind energy is the fastest growing energy technology and does not harm the environment
- Good sites are abundant, but are often located far from where energy is needed

Solar Energy



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- **Solar energy** from the sun is the greatest renewable source of energy

continued

Solar Energy

- The sun's energy can be captured and used in several ways
- The supply of solar energy is almost limitless and generating it does not harm the environment

Biomass



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- Energy is stored in dry, decayed plant and animal matter called **biomass**

continued

Biomass

- When burned, biomass produces heat and steam that can be converted to electricity
- Wood, crops, and solid waste are types of biomass often burned to create energy

Geothermal Energy



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- *Geothermal energy* is derived from heat produced within the earth

continued

Geothermal Energy

- Heat is collected as steam to generate electricity
- It is available in certain locations, especially areas in the western U.S.

Energy in the Future

- Delivering energy may become a problem because of dependence on fossil fuels
- Renewable energy sources make up a small percentage of U.S. energy supplies
- Greater investment in research and development is needed

You Can Help Conserve Energy

- An important goal for everyone is to reduce the use of fossil fuels
 - Use energy-efficient appliances
 - Learn how to live with and use appliances efficiently
- Using less energy lowers utility bills

Heating and Cooling a Home



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- More than half of the energy used by a household is for heating and cooling

continued

Heating and Cooling a Home

- To conserve energy
 - use a programmable thermostat
 - wear layered garments
 - seal air leaks
 - use appropriate window coverings
 - add insulation, if needed

continued

Heating and Cooling a Home

- To conserve energy
 - use storm windows or replace single-pane windows with double-pane windows
 - use trees, shrubs, and vines to help shield a home from the elements

Water Heating



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- The water heater uses about 15 percent of a home's energy budget

continued

Water Heating

- Reduce hot water usage by
 - using cold water when possible
 - taking quick showers and using aerating showerheads
 - running appliances with full loads only
 - lowering the water heater temperature
 - insulating the hot water storage tank



Think Further

- *What steps can you take to lower energy use in your home?*



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Lighting and Appliances

- About 28 percent of the home's energy budget is used by
 - lighting
 - appliances
 - TVs and other power-using equipment

Lighting

- Use energy-efficient lightbulbs like compact-fluorescent bulbs which last 4 to 10 times longer than traditional bulbs



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continued

Lighting

- Use the lightbulb that gives adequate light with the lowest wattage
 - Wattage indicates the amount of energy required to operate a bulb
 - Lumens indicate the amount of light produced by a given source

Refrigerated Food Storage

- To save energy
 - open and close doors quickly
 - cover food storage containers before storage
 - keep refrigerator temperatures between 37°F and 40°F

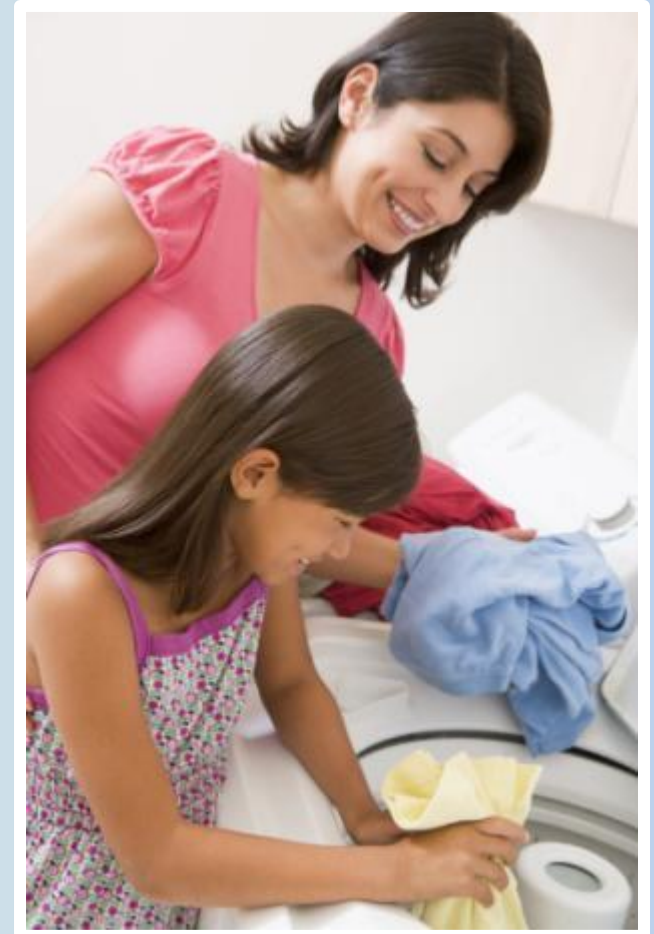
Other Kitchen and Laundry Appliances

- Dishwasher
 - When loading, scrape off rather than rinse off food scraps and use the air-drying feature
- Range
 - Match pan size to the heating element, use covers, and use the oven to cook several dishes at the same time

continued

Other Kitchen and Laundry Appliances

- Clothes washer and dryer
 - Adjust water level to load size
 - Dry heavier items separately
 - Avoid overdrying



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Home Electronics and Office Equipment

- They use energy when they are turned off
- When not in use, unplug products or plug them into a power strip that is switched off

Shopping for Energy Efficiency

- When shopping for new products, consider
 - purchase price
 - operating cost
- *EnergyGuide labels* help you compare operating costs of major appliances
- *Energy Star labels* identify the most energy-efficient products

Section 5-3 Review

- *True or false.* Fossil fuels are a type of renewable energy.
 - *false—they are a type of nonrenewable energy*
- Why is burning coal, which is abundant, to create energy a problem?
 - *by-products of burning coal can add to air pollution*

continued

Section 5-3 Review

- More than half of the energy used in a household is used for _____ and _____.
 - *heating, cooling*
- What does the wattage of a lightbulb indicate?
 - *the amount of energy required to operate the bulb*