

Cooking Basics

Section 23.1

Choose Your Ingredients

■ **Main Idea** Herbs, spices, fruit, and vegetables all contribute to preparing delicious meals.

Section 23.2

Cooking Techniques

■ **Main Idea** Grains, fruits, vegetables, and meats come in endless varieties. All of these foods can be cooked to serve as main dishes, side dishes, or snacks.





Explore the Photo

Recipes show you a variety of ways to cook and flavor to foods. It all depends on the food and the results you want. **Why are recipes useful?**

Writing Activity

Compare and Contrast

Finding Similarities and Differences

Think about two dishes that you enjoy eating. Compare and contrast the two dishes, focusing on what about them is the same and what is different. Use specific examples to show the similarities and differences.

Writing Tips Follow these steps to write a compare and contrast report:

1. Write a topic sentence that includes what you will compare.
2. Use specific examples and details to show the similarities and differences.
3. Use transition words and phrases between comparisons and contrasts.

Reading Guide

Before You Read

Get Your Rest The more well-rested and alert you are when you sit down to study, the more likely you will be to remember the information later. Studying in the same state of mind as when you are likely to take a test, fully rested and mentally sharp, can help to ensure your best performance.

Read to Learn

Key Concepts

- ✓ **Explain** Why herbs and spices are important.
- ✓ **Describe** how fruit may be processed.
- ✓ **Name** a benefit of convenience foods.

Main Idea

Herbs, spices, fruit, and vegetables all contribute to preparing delicious meals.

Content Vocabulary

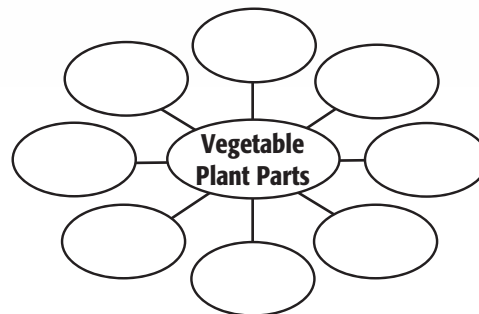
- produce
- processed
- antioxidant
- convenience food

Academic Vocabulary

- crucial
- seasonal

Graphic Organizer

Vegetables come from many different parts of plants. As you read, name eight plant parts that produce the vegetables you eat. Use a graphic organizer like the one shown to help you organize your information.



Graphic Organizer Go to this book's Online Learning Center at glencoe.com to print this graphic organizer.

Academic Standards



English Language Arts

NCTE 5 Use different writing process elements to communicate effectively.



Mathematics

NCTM Data Analysis and Probability Understand and apply basic concepts of probability.



Social Studies

NCSS III B People, Places, and Environments Create, use, and synthesize information from various representations of the earth, such as maps, globes, and photographs.

NCTE National Council of Teachers of English

NCTM National Council of Teachers of Mathematics

NSES National Science Education Standards

NCSS National Council for the Social Studies

Just about everyone knows how to cook something. Maybe you are a whiz at scrambled eggs or pancakes. Perhaps you are already in charge of preparing entire meals for your family. Whatever level of experience you have in the kitchen, you can improve your cooking skills with a few tips and guidelines.

Basic Ingredients

When cooking, the success of your dish depends in part on following step-by-step instructions. As you learn to cook, you will notice that some common ingredients are found in many recipes. Some of these basic ingredients are flour, sugar, shortening or butter, milk, eggs, and spices. Each ingredient in a recipe is used for a specific purpose.

Herbs and Spices

Herbs and spices are the special ingredients that separate average cooks from great cooks. Herbs and spices add taste, color and aroma, or scent, to foods. They are the special ingredients that make some recipes better than others. Herbs and spices are **crucial**, or very important, to the flavor of a dish. There are many varieties of herbs and spices. Learning which herbs and spices to use, and how much to use, is based on experience. Here are some common herbs and spices:

- **Basil** This popular herb has a mild flavor. It is often used in soups, salads, and pizzas.
- **Parsley** Often used as a garnish, this herb is also found in green sauces, such as pesto. It has a soothing effect on your taste buds.
- **Chives** This herb has a mild onion flavor. It is often used as a garnish or to add flavor to soups and dips.
- **Cilantro** This herb has a unique flavor and aroma. It is often used in salsas, Mexican dishes, and dips.
- **Dill Weed** This herb has a delicate flavor. It is often used in dips and fish dishes.
- **Cinnamon** This spice comes from the bark of the laurel tree. Ground cinnamon is common in cakes, cookies, and specialty drinks.
- **Nutmeg** This spice comes from the fruit of the nutmeg tree. It has a nutty, mild flavor. It is used often in pies and puddings.
- **Cumin** Commonly found ground or as a whole seed, this spice is somewhat hot. It is often used in marinades and sauces.
- **Saffron** This yellow spice comes from the crocus plant. It is used to give its yellow color and flavor to foods.
- **Garlic** This strong spice is a dried root from the lily family. It grows in a bulb that is then minced or chopped.

As You Read

Connect Think about a dish that you recently prepared for your family or friends. What was involved in the preparation?

Vocabulary

You can find definitions in the glossary at the back of this book.

Extra Flavor Herbs and spices give foods unique flavors. *Instead of seasoning with salt, what herbs or spices might taste good with potatoes or green beans?*

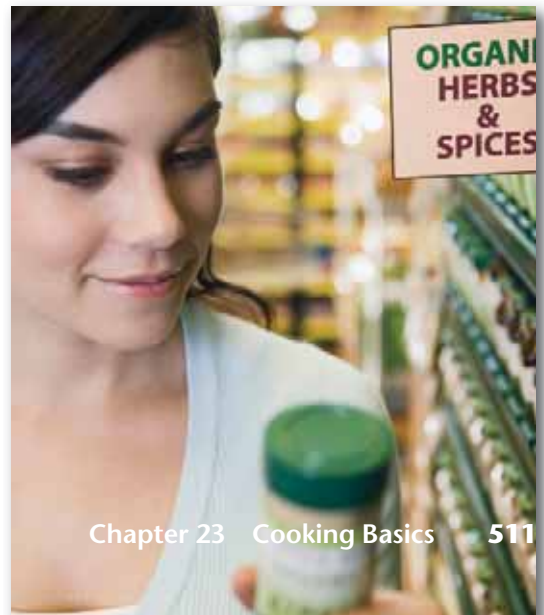


Figure 23.1 Measurement Equivalents

Accurate Measuring It is important to measure accurately when preparing meals. *What would happen if you used 2 cups of milk instead of 1 cup for your mashed potatoes?*

Customary	Customary Equivalent	Approximate Metric Equivalent
1 teaspoon	none	5 milliliters (mL)
1 tablespoon	3 teaspoons	15 milliliters
½ cup	8 tablespoons	125 milliliters
1 cup	16 tablespoons 8 fluid ounces	250 milliliters
2 cups	1 pint	500 milliliters
4 cups	1 quart	1000 milliliters or 1 liter (L)
1 pound	16 ounces	500 grams (g)

Measure Ingredients

By measuring accurately, using the proper measuring tools, and following directions, you will ensure that your recipes are consistent and turn out the same way every time you use them.

When you cook, you will probably use customary measurements such as cups for volume and pounds for weight. The customary measurement system is the measurement system commonly used in the United States. However, the metric system can also appear in recipes, so you may need to know how to convert between the two systems. The metric system is a system of weights and measures based on multiples of ten and is used in most other countries. See **Figure 23.1** for measurement equivalents.

Cooking Temperature

The customary system measures temperature in degrees Fahrenheit (°F). The metric system measures in degrees Celsius (°C). Many thermometers show both. Recipes sometimes include length measurements, such as the length and width of a pan or the size of a vegetable. The customary system measures length in inches (in.), while metrics uses millimeters (mm) or centimeters (cm).



Confirm How can you make sure that your recipe will come out the way you want?

Fruits and Vegetables

Fruits and vegetables, also called **produce**, are full of essential nutrients. Vegetables can fit into your eating plan in many ways. Serve them as side dishes, main dishes, salads, and garnishes. Like vegetables, fruits are easy to include in your eating plan. Fruits come in a variety of forms, such as fresh, frozen, canned, dried, and as a juice. Many fruits have skins you can eat, such as apples and pears, which can add fiber to your snacks.

Fruits

Besides tasting great, fruit provides important vitamins and minerals, carbohydrates, and fiber. It is easy to get the recommended number of daily servings because fruits go well with any meal and make great snacks. Try adding dried fruit, such as apples or apricots, on your breakfast cereal. Freeze grapes or berries and use them in place of ice cubes in juices and teas.

Some produce, like strawberries, is **seasonal**, or readily available at certain times of the year. Seasonal food is less expensive than food that is not in season. When you buy produce in-season, you get the best possible quality and also save money. Out-of-season produce may be less nutritious because it is often artificially ripened, or shipped a long distance. If fresh fruits are not available, you might choose processed fruits. **Processed** means that a food is changed from its raw form before being sold. Fruits that are frozen, canned, or dried are considered processed.

Vegetables

Vegetables are a delicious part of a well-balanced diet. They are also valuable sources of carbohydrates, fiber, and important vitamins and minerals. New varieties are developed each year. Like fruits, vegetables are most nutritious when they are fresh. Vegetables are seasonal, but most are available year-round. You can choose frozen, canned, dried, or fresh vegetables.



MATH YOU CAN USE



Probability

Juanita has baked three dozen cupcakes for a party. Fifteen of the cupcakes have a fresh strawberry filling, another twelve are vanilla, and the remaining 9 are banana. However, Juanita covered each cupcake with the same white vanilla frosting, and now she cannot tell them apart. If she selects one at random, what is the probability it will be strawberry? Vanilla? Banana?

Math Concept **Finding Theoretical**

Probability Mathematical probability is a number between 0 and 1 that measures the likelihood of an event occurring. The higher the number, the more likely the event will occur. To find an event's probability, write a fraction (in lowest terms) with the number of ways the event can occur as the numerator and the total number of possible outcomes as the denominator.

Starting Hint Since there are 36 total cupcakes, there are 36 possible outcomes when Juanita goes to pick one cupcake, so use 36 as the denominator of each fraction.

NCTM Data Analysis and Probability Understand and apply basic concepts of probability.



For more math help, go to the Math Appendix located at the back of this book.

Measuring Correctly

In this activity you will use tools to measure different ingredients accurately. Before you begin, read through the entire Hands-On Lab assignment. Write down any questions that you have about the activity. Reread the text or ask your teacher for help if you need it.



Supplies

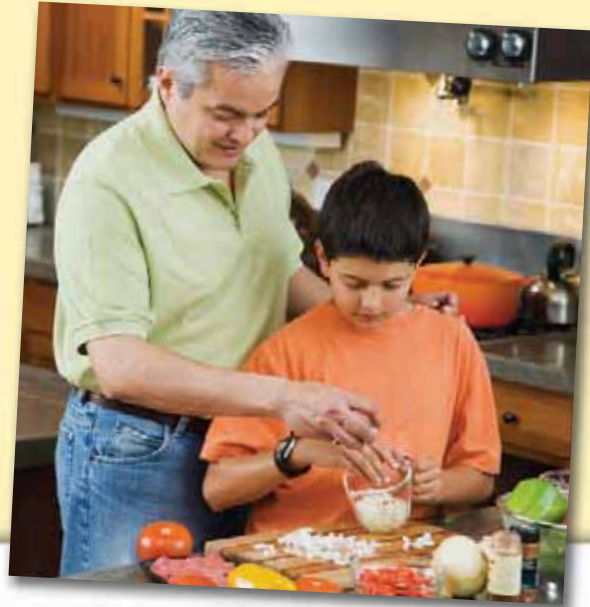
- ✓ Flour sifter
- ✓ Dry and liquid measuring cups and spoons
- ✓ Metal spatula
- ✓ Rubber scraper
- ✓ Flour
- ✓ Shortening
- ✓ Oil
- ✓ Baking soda

Develop Your Plan

- Gather measuring utensils.
- Gather ingredients.
- Measure ingredients.

Implement Your Plan

- Gather your measuring utensils and ingredients.
- Sift and measure 1 cup of flour.
- Press shortening into a dry measuring cup, making sure there are no air pockets. Level it with a metal spatula. Remove shortening with a rubber scraper.



- Place the liquid measuring cup on a flat surface. Pour oil up to the $\frac{1}{2}$ cup line. Check it at eye level.
- Pour $\frac{1}{4}$ teaspoon of baking soda into the measuring spoon. Level the top with a metal spatula.

Evaluate Your Results

Why must you measure ingredients exactly? What could happen if you do not measure ingredients correctly? Write down three tips that you learned from this experience. Write one or more paragraphs to explain your answer.



Projects and Activities Go to this book's Online Learning Center through glencoe.com for more projects and activities.

Vegetables actually come from many different parts of plants. Vegetables can be:

- Fruits, such as tomatoes, eggplants, and peppers.
- Flowers, such as broccoli and cauliflower.
- Stems, such as asparagus and celery.
- Roots, such as beets, carrots, and turnips.
- Tubers (underground stems), such as potatoes.
- Bulbs, such as onions and garlic.
- Leaves, such as cabbage, greens, kale, and spinach.
- Seeds, such as beans, corn, and peas.


Fresh vegetables need to be refrigerated until you are ready to use them. For best results, they should be used within a few days after you buy them. Before serving fresh vegetables, wash them carefully under cold running water. If you plan to eat them raw, you may want to peel the vegetables and blot them dry. To keep raw vegetables crisp, do not wash them too far in advance of serving time. Raw vegetables can be enjoyed alone, or you can try dipping carrots, cauliflower, or broccoli in low-fat ranch dressing for a refreshing and healthful snack.

Many vegetables contain antioxidants. An **antioxidant** (¹an-tē-'äk-sə-dənt) is a substance that protects cells from oxidation, a chemical reaction that causes cell damage. Antioxidants may help prevent heart disease, cancer, and other ailments. Antioxidants include vitamins C and E, beta-carotene, and the mineral selenium.



Identify What is an antioxidant?



 **Fresh Fruit** Choose the freshest fruit you can in order to get the best flavor and highest nutritional value. **How much fruit should you eat every day?**



Handle Criticism

Limit Self-Criticism

Try not to criticize yourself too much if you make mistakes. It is okay to be critical because this can often lead to self-improvement, but do not be too hard on yourself. Making mistakes is part of the learning process.



Convenience Foods

There may be occasions when you will want to prepare meals in a hurry. **Convenience foods** are already prepared or partially prepared to save you time. For instance, you might buy a bag of tossed salad instead of purchasing all the ingredients and cutting them up yourself. A common type of convenience food is a mix such as cake and muffin mixes. Other convenience foods include frozen pizza, canned chili, and soup. Be careful when you use convenience foods as they tend to cost more than fresh foods. Additionally, they may not taste as fresh. They may contain preservatives, which are chemicals added to make foods last longer. However, once in a while it may be worth the extra cost to save time and avoid wasting food.

Always follow the directions given on the package. Make sure in advance that you have all the ingredients and utensils you will need and that you understand all the instructions. When using a general-purpose baking mix, use only the recipes provided on the box. Do not try to substitute the mix for ingredients in another recipe.

Section 23.1 After You Read

Review What You Have Learned

1. **List** the common, basic ingredients found in many recipes.
2. **Name** ways to use vegetables in your food.
3. **Explain** a drawback of using convenience foods.

Practice Academic Skills



English Language Arts

4. Use clip art, illustrations or pictures from magazines to create a pamphlet encouraging people to buy spices. Discuss the benefits of spices, using specific examples of spices and the dishes in which they can be used. Share your pamphlet with the class.

NCTE 5 Use different writing process elements to communicate effectively.



Social Studies

5. Use poster board to create a map that shows where fruits and vegetables are most commonly grown in the United States. Use graphics, clip art, or your own drawings to show the region and the produce grown there.

NCSS III B Create, use, and synthesize information from various representations of the earth, such as maps, globes, and photographs.



Check Your Answers Check your answers at this book's Online Learning Center at glencoe.com.

Reading Guide

Before You Read

Stay Engaged One way to stay engaged when reading is to turn each of the headings into a question, and then read the section to find the answers

Read to Learn

Key Concepts

- ✓ **Name** two types of breads.
- ✓ **Explain** how fruits and vegetables are a part of a well-balanced diet.
- ✓ **Describe** ways to use milk products in cooking.
- ✓ **Identify** two basic methods of cooking meat, poultry, or fish.

Main Idea

Grains, fruits, vegetables, and meats come in endless varieties. All of these foods can be cooked to serve as main dishes, side dishes, or snacks.

Content Vocabulary

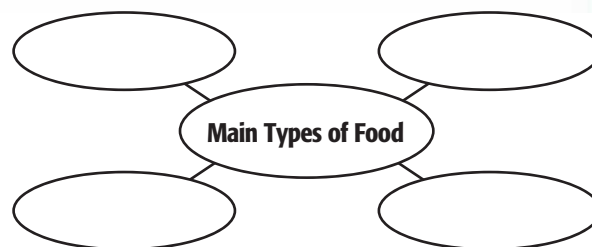
- quick bread
- batter
- yeast bread
- legume
- quiche
- casserole
- scald
- curdle
- omelet

Academic Vocabulary

- tender
- retain

Graphic Organizer

As you read, list the four main types of food discussed in the section. Use a graphic organizer like the one shown to help you organize your information.



Graphic Organizer Go to this book's Online Learning Center at glencoe.com to print this graphic organizer.

Academic Standards



English Language Arts

NCTE 12 Use language to accomplish individual purposes.



Social Studies

NCSS VIII A Science, Technology, and Society Identify and describe both current and historical examples of the interaction and interdependence of science, technology, and society in a variety of cultural settings.

NCTE National Council of Teachers of English

NCTM National Council of Teachers of Mathematics

NSES National Science Education Standards

NCSS National Council for the Social Studies

There are many different ways to prepare food. To get what you want from your meals, it is important to know how to cook bread and grains, fruits and vegetables, milk products, and meat, poultry, and fish.

As You Read

Connect Think about a recent meal you cooked for yourself, or a meal that was cooked for you. How was each item cooked or prepared?

Vocabulary

You can find definitions in the glossary at the back of this book.

Cooking Grains

Grains include cereal, rice, pasta, and bread. These go well with vegetables, fruits, cheese, meat, chicken, fish, and beans.

Breads

Breads are made from whole wheat, rye, white, or corn flour. Other ingredients are added to give each type of bread a particular flavor, texture, and appearance.

Quick Breads and Yeast Breads

Quick breads are breads in which the leavening agent is baking powder or baking soda. Baking powder and baking soda cause the air bubbles to form, making the bread rise quickly as it bakes. It is important to mix the **batter**, a liquid or semiliquid mixture, usually containing flour, milk, and eggs, just long enough to blend the ingredients. Too much mixing makes quick breads flat and heavy. Air bubbles, which form during baking, make quick breads light and fluffy.

Yeast breads are breads in which the leavening agent is yeast. They take longer to prepare than quick breads. Most sandwich breads, French and Italian breads, and hamburger buns are yeast breads.

A dough made with yeast must rise twice. First, you must let it rise in a warm place outside the oven for an hour or more. Then you punch it down, shape it, and let it rise in the pan before baking. You can also buy frozen yeast dough. Let the dough warm to room temperature and rise until it is ready to be baked.

International Sandwiches Sandwiches are more than just slices of ham on wheat bread. Greek gyros, and the Asian spring rolls in this photo are also types of sandwiches. *What other types of sandwiches do you enjoy?*



Sandwiches

A sandwich is any filling put in or on bread or another edible wrapper. You can use any type of bread or a wrap, such as pita or a tortilla. Then add a spread, such as mustard, mayonnaise, honey, pesto, butter, or margarine. Fillings can include peanut butter, fruit preserves, tuna, chicken salad, meat or cheese. Finally, use lettuce, spinach, avocado, relish, sprouts, tomatoes, peppers, and olives for extra flavor. Try a tuna melt by putting tuna and cheese on a bagel or bread and melting the cheese. Peanut butter with banana slices on oatmeal bread provides foods from three of the five food groups.

Cereal, Rice and Pasta

Some breakfast cereals, rice, and pasta must be cooked before you eat them. Some of the cooking techniques are similar because they all contain corn starch.

Cereal can be enjoyed with cold milk or cooked and eaten hot such as instant oatmeal, grits, and wheat cereals. They can be cooked with water or milk on top of the stove or in a microwave oven. Try adding raisins or sliced bananas to hot cereal to add texture, flavor, and sweetness.

Rice is a grain that must be cooked. Rice should be simmered in water, not boiled. When cooked properly, rice is light and fluffy, not heavy or gummy. Do not rinse rice, because rinsing removes nutrients. Use a little oil in the cooking water to help the grains separate and to prevent foaming. Keep the lid on while cooking and do not drain. Fluff the rice with a fork before serving. Before you cook rice, read the directions on the package.

Pasta is made from wheat flour, water, and sometimes eggs and other flavorings. It comes in many shapes and sizes, from long strands to corkscrews to shells. Pasta is another grain that must be cooked before it is eaten. To make your pasta slippery and not sticky, use plenty of water, about 4 quarts (4L) of water per pound of pasta. Heat the water to a boil before adding the pasta. Keep it boiling during the cooking time. Do not cover the pot. Stir the pasta occasionally to prevent clumping. Cook the pasta just long enough so that it is **tender**, or easily chewed or cut, but slightly firm. Use the package instructions to guide cooking times. Drain the pasta carefully by pouring the pasta into a colander placed in the sink.



Follow Directions What are some tips for cooking rice?



Handle Criticism

Accept Constructive Criticism

Not all criticism is bad. In fact, some can be very helpful and positive. Criticism given in a fair, respectful way is actually a useful tool in helping people improve and avoid mistakes in the future.





Handle Criticism

The Golden Rule You have probably heard the phrase, "Treat others as you want them to treat you." Keep this in mind when you are tempted to criticize others. If being criticized in this way did not make you feel good, it will not make others feel good, either.



Cooking Fruits and Vegetables

When you think of the kinds of fruit you enjoy, you probably think of eating raw fruit, such as apples, grapes, and bananas. However, fruits are used in many cooked dishes, too. Like fruit, vegetables can be enjoyed raw or cooked. Some vegetables, such as potatoes, winter squash, and artichokes, must be cooked before you eat them.

Baked fruit can be used for desserts such as baked apples and baked pears. Recipes include fruit, butter, sugar, cream, and spices such as cinnamon or nutmeg. Fruits can be baked in a conventional oven or a microwave oven or cooked in a pan on the stove.

Fruits taste and look best when they are cooked properly. During cooking, small amounts of some vitamins are lost. Some dissolve in water and some are destroyed by heat and air. To minimize nutrient loss, use low heat and as little water as possible.

Like fruits, vegetables can **retain**, or keep, their nutrients and keep their texture and flavor if they are cooked properly. Cook vegetables until they are tender and crisp, not soft. To prevent vitamin and mineral loss during cooking, add as little water as possible, use a lid to speed cooking time and avoid overcooking. Vegetables that are cooked properly have a somewhat brighter color than raw ones. For example, green beans are bright green when they are done, and olive green when they have cooked too long.

Vegetables can be cooked and served as a side dish or added to other ingredients to make a casserole. A **casserole** is a one-dish meal that is baked and often reheated after cooking. The most common ways to cook vegetables are:

- **Simmering** Cook vegetables in a small amount of liquid, just below the boiling point. Cover the pan with a tight-fitting lid.
- **Steaming** Place vegetables inside a steamer over simmering water inside a covered pan. The vegetables should not touch the water.
- **Baking** Vegetables, such as potatoes, are baked in their skins. Before baking, pierce the skins several times so they do not burst.
- **Stir-frying** Cook vegetables quickly over high heat while stirring them in a small amount of oil.



Explain How can you prevent vitamin and mineral loss when cooking vegetables.

Cooking with Milk Products

Milk or cream can be used to make soups, sauces, puddings, and custards. Milk and buttermilk are often used in cakes, pies, breads, and muffins.

Thick, creamy sauces add flavor to many dishes. A basic white sauce made with milk can be served over vegetables or noodles. For extra flavor, add cheese or herbs to the sauce.

When cooking with milk products, it is important to be especially careful. Milk burns, or scorches, easily if the temperature is too high or if it is cooked too long. To cook milk you need to **scald** it, or bring it slowly to a temperature just below the boiling point. Never let milk boil. Heat only until little bubbles begin to appear around the edge of the pan.

Milk may curdle if you do not handle it properly. When milk **curdles**, it separates into little particles or curds. Adding tomatoes or fruit juices to milk may cause curdling, as they contain acid. To avoid this, add ingredients very slowly and stir the milk constantly.

Cheese is an important ingredient in many recipes. Cheese is supposed to melt, not cook, so heating cheese too long or at high temperatures may cause it to burn or become rubbery or stringy. When cooking with cheese, use low to medium heat. Grate or shred hard cheeses, such as cheddar, before adding them to other ingredients. The cheese will blend faster and more evenly. Add cheese at the end of the cooking time so that the cheese will not become overcooked.

Try sprinkling grated cheese on soups, chili, baked potatoes, or burritos. For an easy snack, eat cheese with crackers, crusty bread, or fresh fruit.



Describe What can you do to keep cheese from burning or becoming rubbery or stringy when you cook with it?



Macaroni and Cheese A popular favorite among children is macaroni and cheese. **What ingredients could you add to this dish to make it appealing to adults?**





Safety Check

Avoiding Steam Burns

Moisture can build up inside a pot or pan and create steam. When the steam hits the air to escape, it can cause severe burns.

- Carefully remove lids from pots and pans when cooking.
- Use a potholder to remove the lid.

Cooking Meat, Poultry, and Fish

Protein-rich foods such as meat, poultry, and fish are popular main dishes. They can be prepared in a variety of ways. When cooking meat, poultry, or fish, the two basic methods you will use are moist heat and dry heat (See **Figure 23.2**). The method you choose depends on the recipe you are following and the tenderness of the meat or poultry.

Moist Heat

When you boil, stew, braise, or simmer meat, you are using moist heat. Moist-heat cooking is cooking food slowly in a covered container, usually with water, broth, or a sauce. When cooked, some of the meat juices will flow into the cooking liquid. Moist-heat cooking methods are good choices to use with less expensive, tougher cuts of meat. When cooked slowly in liquid, meats become more tender and flavorful. Use moist heat to cook chuck roast, corned beef, pork blade steak, pot roast, poultry, round steak, spareribs, and stew meat.

Dry Heat

Dry-heat cooking is cooking without liquid. Broiling, charbroiling, roasting, baking, pan frying, and deep frying are dry heat cooking methods. This method is used for tender cuts of meat such as beef rib roast, fish, ground beef, pork, turkey, ham, lamb, pork chops, poultry and sirloin steak.



List What are some dry-heat cooking methods?

Figure 23.2 Cooking Methods for Meat

Dry Heat or Moist Heat? Dry-heat cooking is used for tender pieces of meat, while moist-heat cooking is used to help make tough cuts more tender. *What types of meat would benefit from moist-heat cooking?*

Dry Heat Methods



Roasting and Baking



Frying



Broiling

Moist Heat Methods



Stewing



Braising

Other Proteins

Other high-protein foods can be used as the main dish instead of meat, poultry, or fish. Beans and eggs are two good substitutes. They are high in protein, vitamins, and minerals and low in cost. They are two of the most nutritious foods you can cook. They are also both vegetarian options.

Legumes are dry beans and peas which come in a variety of tastes and textures. Red kidney beans, black beans, white beans, lentils, lima beans, split peas, and black-eyed peas offer healthful alternatives to meat, poultry, and fish dishes. You can make baked beans or roll them in tortillas with rice and cheese to make burritos.

Eggs can also be a main dish. Eggs can be hard-boiled, scrambled, fried, or used in quiches and omelets. A **quiche** (ˈkēsh) is a main-dish pie filled with eggs, cheese, and other ingredients such as ham, spinach, and mushrooms. An **omelet** is a well-beaten egg that is first cooked in a frying pan without stirring. Then it is filled with other ingredients, such as mushrooms, peppers, and cheese.

Section 23.2 After You Read

Review What You Have Learned

1. **Describe** the process for making yeast bread.
2. **Name** the most common ways to cook vegetables.
3. **Explain** the best ways to cook with cheese.
4. **Identify** two sources of protein other than meat.

Practice Academic Skills



English Language Arts

5. Write a letter to someone who is trying to cut back on sugar intake. Tell him or her that fruit is an easy, healthful, convenient, and delicious substitute for candy or cookies. Use information from this chapter, but write in your own words.



Social Studies

6. Choose a historical period and research a cooking technique addressed in the section. Compare and contrast the cooking technique with what we do today. How was cooking different? How have techniques changed? Has the technique improved? Share your information with the class.

NCTE 12 Use language to accomplish individual purposes.

NCSS VIII A Identify and describe both current and historical examples of the interaction and interdependence of science, technology, and society in a variety of cultural settings.



Check Your Answers Check your answers at this book's Online Learning Center at glencoe.com.

Discovering Careers

Focus on Careers in Food



Do you like to try new cooking techniques? Are you interested in how food is prepared before it arrives in markets or restaurants? If you answered yes to either of those questions, you might want to consider a future career in food preparation. The following chart explores several careers in the food industry.

Career Activities

At School

1 Select three of the careers listed. Research the education, training, and work experience required for each career. Write a summary of your results.

At Home

2 Plan a dinner with your family. Each of you should take responsibility for one portion of the meal (for example, main dish, side dish, desert, appetizer, sauce). What techniques did each of you use to cook you part of the meal?

At Work

3 Plan three nutritious brown-bag lunches that you could take to work. Compare your examples with those of your classmates.

In the Community

4 Contact and interview someone in your community who works in the food industry. Ask this person to describe what his or her typical work day is like. Share what you learned with your class.

Job Title	Job Description
Menu Planner	Works closely with executive chef to select menu items. Participates in cost control, ordering of supplies, and some food preparation.
Pastry Chef	Prepares a wide variety of pastries and desserts. Supervises pastry cooks. Plans work schedules. Orders supplies.
Farmer	Raises both crops and livestock. Determines crops to be grown and livestock to be bred. Monitors market conditions and weather.
Baker	Uses raw ingredients to bake breads and pastries for sale. Offers specialty breads for a variety of events.
Food Critic	Evaluates restaurants based on standards for cooking techniques, flavor, and service. Writes column or blog with recommendations.

Learn More Online  glencoe.com

Career Investigations Go to this book's Online Learning Center for activities and worksheets to help you explore careers.



Chapter Summary

Section 23.1 Choose Your Ingredients

The success of your dish depends in part on following step-by-step instructions. By measuring accurately, using the proper measuring tools and following directions, you ensure that your recipes turn out the same every time. Herbs and spices add taste, color, and aroma to foods. Fruits and vegetables are a delicious part of a well-balanced meal plan. Convenience foods can save you time.

Section 23.2 Cooking Techniques

There are many techniques for cooking food. Grain products like rice, pasta, and oatmeal are cooked in water. Some foods made from grains must be cooked before you eat them. Like fruit, vegetables can be enjoyed raw or cooked. Vegetables retain their nutrients and keep their texture and flavor when cooked properly. When cooking meat, poultry, or fish, you can use moist heat or dry heat.

Words You Learned

1. Create a fill-in-the-blank sentence for each of these vocabulary terms. The sentence should contain enough information to help determine the missing word.

Content Vocabulary

- produce (p. 513)
- processed (p. 513)
- antioxidant (p. 515)
- convenience food (p. 516)
- quick bread (p. 518)
- batter (p. 518)
- yeast bread (p. 518)
- casserole (p. 520)
- scald (p. 521)
- curdle (p. 521)
- legume (p. 523)
- quiche (p. 523)
- omelet (p. 523)

Academic Vocabulary

- crucial (p. 511)
- seasonal (p. 513)
- tender (p. 519)
- retain (p. 520)

Review Key Concepts

2. **Explain** why herbs and spices are important.
3. **Describe** how fruit may be processed.
4. **Name** a benefit of convenience foods.
5. **Name** two types of breads.
6. **Explain** how fruits and vegetables are a part of a well-balanced diet.
7. **Describe** ways to use milk products in cooking.
8. **Identify** two basic methods of cooking meat, poultry, or fish.

Critical Thinking

9. **Explain** how you can retain the nutrients in vegetables when you cook them.

Real-World Skills and Applications

Problem-Solving

10. **Quick and Nutritious Meal** You have 30 minutes to prepare a nutritious dinner for you and your family. You have chicken breasts as the main ingredient. What cooking methods could you use to prepare dinner? What could you add to the meal to increase its nutritional value?

Technology Applications

11. **Herb and Spice Guide** Use a spreadsheet or word-processing software to make a reference guide for cooking with herbs and spices. With permission from a teacher or parent, go online to search for information to add to what you learned in this chapter. Include information about how herbs and spices work together. Also look for examples of foods that work best with specific herbs and spices.

Financial Literacy

12. **Buying Convenience Foods** As their name implies, convenience foods can save busy home cooks a great deal of shopping and cooking time versus preparing meals and baked goods from scratch. However, convenience foods can be less nutritious than home-cooked foods, and you can pay a lot for all that convenience. Find a simple cake recipe. Determine the cost of all the ingredients you would need to purchase to make that cake from scratch. Then, determine the cost of making a similar cake using a cake mix. Finally, determine the cost of purchasing a finished cake from a bakery or grocery store. How do the prices compare? What are the pros and cons of each type of cake?



13. **A Nutritious Gift** Snack and fruit baskets are so popular that there are stores and Web sites devoted to creating and selling them as gifts. Create a snack or fruit basket to give to a friend, teacher, or family member as a gift. Include an attractive collection of fruits and tasty, nutritious snacks. Also, find a few recipes for healthful treats. Compile them into a small booklet and create a cover for it, and include the booklet in the basket.



14. **Spice Origins** What is your favorite spice? Is it sweet like cinnamon or hot like curry? Conduct research to learn where your favorite spice originated. What is the spice made from? What was it originally used for? How is it used today? Can the spice be used for something other than adding flavor to food? Present your information in a brief report.
15. **Cancer-fighting Foods** According to the National Cancer Institute, antioxidants are plentiful in fruits and vegetables, as well as in other foods such as nuts, grains and some meats, poultry, and fish. Researchers continue to study the effect of antioxidants on cancer prevention. With permission from your parents or teacher, go online to search for foods that may help prevent cancer. Make a list of at least 10 foods and explain how you can add them to your meals. Include this information in your Life Skills Binder.

Academic Skills



English Language Arts

16. **Cooking Vegetables** Creative preparation can make it easier and more enjoyable to add vegetables to your meals. Having many different options for cooking them will give you more variety in your meals. Create a poster that explains six possible ways to cook vegetables. Include graphics, photos, and clear instructions for each cooking technique. Display your posters in your classroom.

NCTE 8 Use information resources to gather information and create and communicate knowledge.



Social Studies

17. **Research a Family Recipe** Families often have a recipe that has been handed down from one generation to another. Often the recipe has not been written down but is communicated orally from mother or father to daughter or son. Choose a family recipe that has been handed down, and research to find out its origins, the ingredients, and its importance to you family heritage and culture. Write an overview of what you find.

NCSS 1D Culture Compare and analyze societal patterns for preserving and transmitting culture while adapting to environmental or social change.



Mathematics

18. **Slicing Bread** Katherine needs to slice two loaves of fresh-baked bread. The sourdough loaf is 12 in. long, and she would like each slice to be $\frac{3}{4}$ in. thick. A rye loaf is $13\frac{1}{2}$ in. long, and she would like each slice to be $\frac{1}{2}$ in. thick. How many slices will she get out of each loaf?

Math Concept Dividing with Fractions

To divide when a fraction is involved, first convert any mixed or whole numbers to improper fractions. Multiply the first fraction by the reciprocal of the second fraction. Reduce your answer to lowest terms.

Starting Hint For the sourdough, you will need to divide 12 by $\frac{3}{4}$, which requires you to multiply $12/1$ by the reciprocal of $\frac{3}{4}$, or $4/3$. For the rye loaf, first convert $13\frac{1}{2}$ into an improper fraction by multiplying 13×2 and adding that number to 1 to get the new numerator.

NCTM Number and Operations Understand meanings of operations and how they relate to one another.



Standardized Test Practice

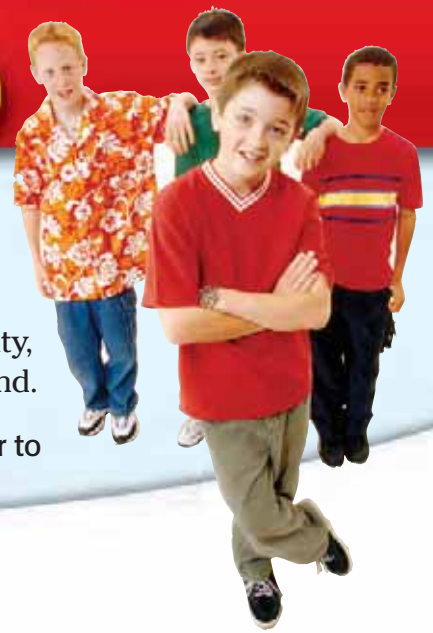
Math Word Problem

Read the word problem and possible answers. Then choose the correct answer.

Test-Taking Tip Solve a word problem in two steps. First, translate the words into an equation of numbers and variables. Then solve each equation in order to get the correct answer.

19. You are getting ready to check out of the grocery store. The store is offering a 22% discount for students shopping for their parents. Your total amount is \$112.53. After you deduct the discount, what will your amount be?
- \$22.51
 - \$90.02
 - \$101.00
 - \$165.04

UNIT 10 Life Skills Project



A Meal from Your Culture

Preparing food from your own culture is a way to explore your identity. Your family may have favorite dishes that they make on holidays and special occasions. Recipe books are often specific to a culture, nationality, or heritage. This project will help you explore food from your background.



My Journal Complete the journal entry from page 465, and refer to it to complete your recipe collection.

Project Assignment ▼

In this project, you will:

- Gather recipes of dishes common to your background.
- Write about a recipe that means something to your family.
- Prepare a dish that reflects your culture.
- Interview someone who shares your heritage.
- Present your findings to your class.
- Include this project in the tenth section of your personal Life Skills binder.

Step 1 Gather Recipes from Your Culture

Ask family members or friends if they have recipes that reflect your heritage. Read cookbooks to find more ideas. Compile the recipes you gather, and write a summary of your research that identifies common ingredients and preparation methods.

Step 2 Choose a Recipe and Prepare a Dish

Pick a recipe you can make. Gather the ingredients, and follow instructions carefully. If you need help, ask a parent or friend. Then write two or more paragraphs that answer these questions:

- ✓ What were the key ingredients?

- ✓ What was the most challenging part of the preparation process?
- ✓ Is there any method you use today that an ancestor might have done differently, for example, using a microwave instead of an open fire?
- ✓ What is the traditional way to serve this dish?

Step 3 Interview a Member of Your Culture

Interview someone in your community who is familiar with the traditions of your culture. Ask these questions:

- ✓ What does this dish mean to you?
- ✓ What is the history of this recipe?
- ✓ Tell me a story about a memorable meal that included this dish.

Use these interviewing skills when conducting your interview and these writing skills when writing the summary of notes from your interview.

Interviewing Skills

- Record interview responses and take notes.
- Listen attentively.

Writing Skills

- Use complete sentences.
- Use correct spelling and grammar.



Step 4 Serve and Present Your Cultural Dish

Use the Life Skills Project Checklist on the right to plan and serve your dish to the class and give an oral report on it.

Use these speaking skills when presenting your final report.


Speaking Skills

- Speak clearly and concisely.
- Be sensitive to the needs of your audience.
- Use standard English to communicate.

Step 5 Evaluate Your Presentation

Your project will be evaluated based on:

- ✓ Organization and cultural relevance of your collected recipes.
- ✓ The dish you prepared for the class.
- ✓ Description of your food preparation experience.
- ✓ The summary written from interview notes.
- ✓ Grammar and sentence structure.
- ✓ Presentation to the class.
- ✓ Creativity and neatness.

 **Evaluation Rubric** Go to this book's Online Learning Center at glencoe.com for a rubric you can use to evaluate your final project.

NCTE 9 Develop an understanding of diversity in language use across cultures.

NCTM Measurement Understand measurable attributes of objects and the units, systems, and processes of measurement.

Life Skills Project Checklist

Research Cultural Recipes

- ✓ Collect traditional recipes from your family or friends.
- ✓ Read cookbooks about food from your background.
- ✓ Prepare a recipe from your heritage.
- ✓ Interview someone who is familiar with your culture.

Writing Skills

- ✓ Describe common ingredients and preparation methods of your culture.
- ✓ Describe your own food preparation experience.
- ✓ Write a summary from your interview with someone who shares your background.

Present Your Findings

- ✓ Prepare a short presentation to give before serving your dish to the class. Describe how your dish is important to your culture.
- ✓ Invite the students of the class to ask any questions they may have. Answer these questions with responses that respect their perspectives.
- ✓ Add this project to your Life Skills binder.

Academic Skills

- ✓ Conduct research to gather information.
- ✓ Communicate effectively.
- ✓ Organize your presentation so the audience can follow along easily.
- ✓ Thoroughly express your ideas.