Culinary Arts Terms

Unit: Culinary Arts

Problem Area: Culinary Vocabulary

Lesson: Culinary Arts Terms

Student Learning Objectives.

Instruction in this lesson should result in students achieving the following objectives:

1. **Use industry terms.**
2. **Use cooking terms.**
3. **Use nutrition terms.**
4. **Use menu terms.**

Resources.

The following resources may be useful in teaching this lesson:

E-unit(s) corresponding to this lesson plan. CAERT, Inc. http://www.mycaert.com.

"Common Cooking Terms," *Kiss Recipes*. Accessed May 2, 2014. http://www.kissrecipes.com/tips/cooking_terms.htm.

"Glossary of Dieting Terms and Definitions," *Free Dieting.* Accessed May 2, 2014. http://www.freedieting.com/weight_loss_terms_glossary.htm.

Hickey, Thomas J. *Volume Food Preparation*. American Technical, 2013.

Kowtaluk, Helen. *Food for Today*, 9th ed. Glencoe / McGraw-Hill, 2005.

Largen, Velda L., and Deborah L. Bence. *Guide to Good Food*, 13th ed. Goodheart-Willcox, 2014.

McGreal, Michael J. *Culinary Arts: Principles and Application,* 2nd ed. American Technical, 2012.

Trakselis, Linda J., and Eric M. Stein. *Culinary Nutrition: Principles and Applications*. American Technical, 2014.



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Equipment, Tools, Supplies, and Facilities

- ✓ Overhead or PowerPoint projector
- ✓ Visual(s) from accompanying master(s)
- ✓ Copies of sample test, lab sheet(s), and/or other items designed for duplication
- ✓ Materials listed on duplicated items
- ✓ Computers with printers and Internet access
- ✓ Classroom resource and reference materials

Key Terms. The following terms are presented in this lesson (shown in bold italics):

- á la carte
- all day
- artificial sweeteners
- au jus
- back of the house (BOH)
- bake
- baste
- batter
- beat
- béchamel
- blackened
- blanch
- blend
- boil
- braise
- broth
- brown
- butterflied
- California menu
- calorie
- calorie-free
- campers
- caramelization
- carbohydrates
- check covers
- cholesterol
- chop
- coat
- core
- creaming
- cube
- cure
- cycle menu
- dash
- deep-fry
- dice
- docking
- dot
- dough
- dredge
- drizzle
- dust
- eighty-six (86)
- enriched foods
- Espagñole
- extra lean
- fats
- fatty acids
- fat-free
- fiber
- fillet
- fire it
- fixed menu
- fold
- Food and Drug Administration (FDA)
- fortified
- front of the house (FOH)
- fry
- garnish
- glaze
- gluten
- grate
- gratuity
- grease and flour
- grill
- hollandaise
- hydrogenated fat
- in-the-weeds
- julienne
- knead
- lean
- light
- low-calorie
- low-fat
- low-sodium
- market menu
- mayonnaise
- meringue
- mince
- minerals
- mirepoix
- mise en place
- mix
- mornay
- nutrients
- on-the-fly
- on-the-rocks
- pan-frying
- party
- poach

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- prix fixe
- proteins
- purée
- reach-in
- reduce
- reduced fat
- roast
- roux
- saturated fat
- sauces
- sauté
- scald
- score
- sear
- season
- semi-á la carte
- serving size
- side work
- sift
- simmer
- skim
- steam
- stiffed
- stir-fry
- stock
- sugar-free
- table d'hôte
- thin
- tomato sauce
- unsaturated fatty acids
- vacherin
- velouté
- vitamins
- walk-in
- water
- whip or whisk
- whole grains
- zest

Interest Approach. Use an interest approach that will prepare the students for the lesson. Teachers often develop approaches for their unique class and student situations. A possible approach is included here.

> *Restaurants, fast-food franchises, hospitals, and other institutions use culinary arts terminology to communicate with one another. Culinary artists are responsible for skillfully preparing visually appealing meals that are pleasing to the palate. A working knowledge of food science and an understanding of diet and nutrition are essential for success in the culinary arts.*

> *Ask students these questions: What are three culinary jobs that work in the BOH? What are three culinary jobs that work in the FOH? What is the difference between chop and mince? What is mise en place? Why is this standard important to successful culinary employees? What is the shape of a cube? What is meringue? How does one sauté a food? Which foods are poached? Which meats are braised? Why are they braised? How does one make a roux? What foods contain artificial sweeteners?*

> *[NOTE: This lesson is a Basic Culinary Arts Disciplinary Literacy Glossary that meets Common Core State Standards for English Language Arts including CC.9-10.L.6 and CC.11-12.L.6 Vocabulary Acquisition and Use: Acquire and use accurately general academic and domain-specific words, phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.]*

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CONTENT SUMMARY AND TEACHING STRATEGIES

Objective 1: Use industry terms.

Anticipated Problem: What are common slang, BOH, and FOH terms?

I. Culinary industry vocabulary

A. Restaurant slang

1. ***All day*** is an announced confirmation of the total number of a specific food item needed, considering all orders. For example: "I have two medium T-bone steaks on the first check and three rare T-bone steaks on the second check. I need five all day."
2. ***Eighty-six (86)*** is an expression that sends the message the house has run out of an item or that an item is removed because of product expiration or menu changes. For instance, "We're out of tomatoes, so 86 the BLTs."
3. ***Fire it*** is an expression that cues the kitchen when to begin cooking a food item or expresses the pacing (timing) for completion of an entire order.
4. ***In-the-weeds*** is an expression that communicates a person or a group is near or beyond the capacity to handle a situation or that they cannot catch up. For example, if the kitchen has food orders backing up, it is said to be "in-the-weeds."
5. ***On-the-fly*** is a directive to a line cook that a food item is needed in a hurry.
6. ***On-the-rocks*** is a phrase that indicates a beverage is to be served over ice.

B. Restaurant dining vocabulary

1. ***Back of the house (BOH)*** is the production area—usually referring to the kitchen—and includes cooking and storage areas. Chefs, line cooks, dishwashers, and other staff work in the back of the house. The area is typically not visible to guests. The dining room staff must communicate clearly with the kitchen to meet customer expectations.
2. ***Campers*** are restaurant guests who linger at their tables long after their meal service is complete. They may obstruct further business by limiting seating capacity.
3. ***Front of the house (FOH)*** is the dining area and the sections of a restaurant typically viewable by guests (e.g., valet service, bar area, host/hostess stand, cashier station, and restrooms). The dining room manager, hosts/hostesses, cashiers, wait staff, and bus people work in the dining room.
4. ***Check covers*** are trays, booklets, or folded pads used to transport the check (bill) to the guest and the payment from the table to the cashier.

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5. ***Gratuity*** is a tip or money paid by customers directly to bartenders, servers, or other personnel for the services they have provided.
6. A ***party*** is a group of one, two, or more people gathered to dine together at an eating establishment.
7. ***Stiffed*** is a situation in which a customer leaves no gratuity or tip for the server or he or she does not tip a common amount (e.g., 15 percent).
8. ***Side work*** is odd jobs (e.g., stocking shelves and supplies, cleaning, and/or rolling silverware) the serving staff is assigned when not serving customers.
9. A ***reach-in*** is a refrigeration or freezer unit small enough that a person can reach in to access the contents but not big enough to enter.
10. A ***walk-in*** is a refrigeration or freezer unit large enough for a person to physically enter through a door to retrieve perishable goods.

Teaching Strategy: *Use VM–A through VM–C in a class discussion.*

Objective 2: Use cooking terms.

Anticipated Problem: What are the basic cooking methods terms?

II. Cooking methods vocabulary

A. ***Mise en place*** (meez-en-plas) is a French cooking term meaning to "put in place." In professional kitchens, it is a way to organize the workspace and complete preparations prior to the beginning of the service time. For example, before beginning to combine recipe ingredients, a person acquires a space to work, collects all ingredients (bring to room temperature, chill, etc.), assembles tools (e.g., scale, knives, zester, and vegetable peeler), gathers equipment (e.g., cutting board, stand mixer, sauté pan, and hotel pans), measures the ingredients, preps the ingredients (e.g., pare, dice, and mince), and secures a location to cook (e.g., stovetop, oven, or pastry table). Mise en place is arguably the most important cooking standard for a successful BOH employee.

B. Dry, moist, and combination cooking

1. To ***bake*** is to cook food in an oven with hot, dry heat all around the food. Baking causes the natural moisture of the food to slowly evaporate. Breads, cakes, pies, cookies, biscuits, and meats all can be baked.
2. ***Blackened*** is highly seasoned food cooked over high heat in a super-heated and heavy skillet until the exterior is charred. This Cajun-style cooking method uses numerous seasonings (e.g., paprika, cayenne, garlic powder, onion powder, thyme, and oregano). The technique is popular with chicken and fish as a finishing option on U.S. menus.
3. To ***blanch*** is to briefly (a few seconds up to 3 minutes) plunge meat, fruits, vegetables, or nutmeats into boiling liquid. Then the food is plunged into ice water to stop the cooking. Blanching firm foods preserves the whiteness of

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chicken and sweetbreads and loosens the skin of produce and nuts to make the food easier to peel.

4. To ***boil*** is to cook food in 212°F liquid that is bubbling vigorously and steaming. This technique is in contrast to simmering—cooking foods in liquid or sauces just below the boiling point (195°F) so the surface barely ripples. For instance, pasta is boiled and sauces are simmered.
5. To ***braise*** is to use a combination cooking method of baking and steaming tough cuts of meat.
   a. The lean meat cubes or roasts are seared in hot fat to add color and flavor.
   b. Next, the braised meats are placed on a bed of chopped vegetables and flavorings (e.g., onion, herbs, and bacon). A small amount of liquid, just enough to cover the contents of the roasting pan, is added. Then the contents are brought to a boil on the stovetop and are removed to an oven.
   c. The roasting pan is placed covered in the oven to complete cooking at a low temperature for a long period of time.
6. To ***brown*** is to take a preliminary preparation step for cooking stews and casseroles. It is a quick sauté or grill process. Some foods are browned at the end of a meal preparation to create a crispy crust or to visually enhance a product. Browning enhances food flavor, texture, and/or eye appeal.
7. ***Caramelization*** is the process of removing water from a sugar (sucrose or glucose); browning occurs as the liquid evaporates and the mixture becomes more concentrated with sugar. The caramelization process is a complex series of chemical reactions. It begins at a very high temperature (300°F and above) compared to other browning processes. In addition, the temperature and time depend on the sugar type. Sugar dissolves in water and is boiled steadily to evaporate the water and brown the sugar. In this process, the sugar syrup is heated without stirring. In addition to sugars, foods with a high amount of sugar that caramelize easily include onions, potatoes, and meat. Meat caramelization is related to the Maillard reaction in which the proteins in meat turn brown when heated.
8. To ***deep-fry*** is to cook food by completely submerging it in hot fat or oil. Deep fat oil may be used again and again if it is strained of bits of food and is stored properly.
9. To ***fry*** is to cook food in hot oil or fat until a crisp brown crust forms. Shallow frying requires a wide shallow pan (e.g., a skillet) and is typically used to cook portion-sized cuts. Dry frying is placing the food directly into a hot skillet with no added fat. This method is commonly used for bacon and sausages.
10. To ***grill*** is to cook on a hot grid, grate, or solid surface. Grilling may be accomplished in open air or well-vented indoor settings. Charcoal, gas, and charbroil grills are often grated. In contrast, indoor grills are often solid surfaces.
11. ***Pan-frying*** is cooking food in a hot pan with a small amount of hot oil, butter, or some other fat. Typically, food is turned once (and perhaps twice) to reach the desired degree of doneness. For example, chicken, fish, and rice can be pan-fried.

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12. To ***poach*** is to cook gently in a simmering liquid—190°F to 200°F. The liquid is barely moving while the food cooks. Poaching is one of the most versatile cooking methods.
    a. Liquids (e.g., water, stock, and syrup) are used to poach foods. The foods being poached add or infuse the liquid with flavors that can be used to make other dishes (e.g., stew or soup) by adding additional ingredients that may include pasta or vegetables. The liquid selected may add flavors to the poached food, too.
    b. Common poached foods are eggs, fish, poultry, and fruit. Adding a little vinegar or lemon juice to the poaching liquid keeps delicate foods—eggs and fish—firm by coagulating the protein more quickly.
13. To ***roast*** is to cook food under dry heat—often in an oven. The traditional definition of roasting is to cook "in front of a fierce heat" on a spit. Today, rotisserie roasting is popular. Typically, meats (e.g., prime rib, crown roast of pork, turkey, and ham) and vegetables (e.g., potatoes and squash) are roasted.
14. To ***sauté*** is to cook food quickly over very high heat in a small amount of fat. Sautéing is an important cooking technique. It has two purposes: searing food to add color and flavor and cooking food to completion (e.g., caramelizing onions or cooking thin meats, such as liver). Sauté pans are straight-sided skillets. The sauté process is conducted as follows:
    a. The sauté pan must be heated before adding the fat. The fat is either a mixture of oil and butter or clarified butter alone. Butter burns at lower temperatures than oil, so the oil acts as a buffer and keeps the butter from burning. The skillet and fat must be very hot before food is added to ensure that the food surfaces seal in the juices. If the juices "run," the food will not brown properly.
    b. Food should be dried before sautéing, as it must be dry when it is added to the hot skillet. Moisture produces steam and keeps the food from browning.
    c. Crowding the pan is a bad idea. Sautéing requires room between the food pieces. Overcrowding causes the food to steam instead of browning. As a result, the juices escape and burn.
15. To ***scald*** is to heat a liquid (usually a dairy product) just below the boiling point—185°F to 211°F. Scalded milk or cream forms a light film (scum) on the surface, which is a good indicator the liquid is scalded. Then the pan or double boiler is removed from the heat before the liquid boils.
16. To ***sear*** is to brown the surface of meat by the application of high heat. Searing seals in meat juices and creates a caramelized crust. The caramelization improves the flavor of the meat.
17. To ***simmer*** is to cook food in a liquid at a temperature just below the boiling point; the surface gently ripples. The heat is low enough to produce small, intermittent bubbles that break the surface. For example, sauces, soups, stews, broths, vegetables, and fruits are simmered.
18. To ***steam*** is to cook food on a perforated rack over boiling water in a covered pan or a tiered steamer, in a large bowl standing in a pan of boiling water, in a

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pressure cooker, or in a commercial compartment steamer. The perforated rack holds the food items above the water so the steam—not the water—does the cooking. In a commercial steamer, a hotel pan (sometimes with a perforated insert) holds the food items—vegetable, pork ribs, etc.—above the water in a pressurized unit. Steaming retains minerals, vitamins, flavor, and color.

19. To ***stir-fry*** is to sauté small pieces of meat and vegetables quickly over very high heat while stirring continuously and rapidly. It is a popular Chinese cooking technique because it is quick and is typically completed in a wok. However, a fry pan works well, too. Moo Goo Gai Pan, Kung Pao Chicken, Sweet and Sour Pork, Ginger Vegetables, Chicken Teriyaki, and Asian fried rice or noodles are some common stir-fry dishes.

C. Enhancing food

1. To ***baste*** is to brush or spoon fat, butter, or liquids over roasting, grilling, or baking foods. Basting often is used with meats and vegetables. The addition of flavorful liquid prevents food from drying out and enhances the taste.
2. To ***cure*** is to prepare food—meat, fish, and vegetables—for immediate or future use by drying, salting, brining, or smoking. Curing adds flavor. Foods that are cured include smoke-cured bacon and sugar-cured ham.
3. To ***season*** is to improve and/or enhance food by adding aroma and/or flavor. The most common seasonings are salt, pepper, mustard, onion, and garlic. Herbs, spices, dressings, and sauces also season food. Common herbs and spices are oregano, nutmeg, cinnamon, ginger (fresh and dried), basil, and parsley. Dressings and condiments—mayonnaise, ketchup, sour cream, crème fraîche (krehm-fresh), horseradish, and sauces (e.g., tomato, butter, and vinaigrette) also season foods.

D. Knife cuts vocabulary

1. ***Butterflied*** is two single fillets cut from a thick pork chop, thick beefsteak, or dressed fish or shellfish held together by a thin strip of uncut skin or flesh (or on the back or belly of a fish). The "hinge" of skin and/or flesh keeps both halves (fillets) together. The meat is unfolded into a "butterfly" shape that exposes more meat to the heat. Large cuts are butterflied to shorten the cooking time and prevent them from drying out during the cooking.
2. A ***chop*** is an irregularly shaped cut, approximately ⅛-inch thick by ½-inch long. It is one of the most common cuts made by chefs.
3. To ***core*** is to remove the non-edible centers, seeds, or pits of fruits and the seeds of vegetables (e.g., peppers and tomatoes).
4. To ***cube*** is to cut food into squares. The largest cubes are typically 1- or 2-inch block-shaped pieces. Shish-kebab food items, for example, are cut in 1- to 2-inch cubes for grilling.
5. To ***dice*** is to cut food into small cubes.
   a. A small dice is a ¼ × ¼ × ¼-inch square (cube).
   b. A medium dice is a ½ × ½ × ½-inch square (cube).
   c. A large dice is a ¾ × ¾ × ¾-inch square (cube).
6. To ***fillet*** (in French "filet") is to remove bones from meat, chicken, or fish.

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7. To ***grate*** is to shred food into fine pieces or strings by rubbing the food against a rough surface (grater). Fine grating is sometimes conducted in a food processor.
8. To ***julienne*** (zhu-lee-ENN) is to cut food in a rectangular stick (baton or match) shape, approximately ⅛ × ⅛ × 2½ inches long. A fine julienne is approximately half as wide and deep and a bit shorter in length.
9. To ***mince*** is to stop just short of making a paste in an exceptionally fine chop. Mincing is commonly used when preparing parsley and herbs for garnish as well as for ginger, garlic, and other pungent ingredients where even spreading throughout a recipe is necessary.
10. To ***score*** is to make shallow, parallel cuts or slices over the surface of meat, fish, or bread and pastry products. Scoring relaxes some of the surface fat, allowing the food to crisp and create a crust. Fish is scored immediately before grilling. Scoring can be a form of food decoration and sometimes a way to allow a marinade to be absorbed by food.

E. Mixing methods

1. To ***beat*** is to mix or force air into a dough, batter, or liquid by vigorous motion. The following tools can be used to beat mixtures: wooden spoon, fork, wire whisk, rotary beater, electric hand mixer, blender, immersion blender, and stand mixer.
2. To ***blend*** is to combine two or more ingredients less vigorously than beating. Blending equally distributes ingredients within a mixture.
3. ***Creaming*** is beating butter and sugar together until the mixture is soft and fluffy and the texture of heavy cream. Creaming lightens the color of the mixture and is a typical first step in preparing cakes and cookies.
   a. Creaming traps air bubbles to add lightness.
   b. It is sometimes a first step in preparing roux mixtures; it is used to make a butter and flour paste.
   c. Creaming is a form of leavening; it adds air as a leavener.
4. To ***fold*** is to combine two mixtures—one light, such as meringue—and one heavier—cake batter, chocolate mousse base, etc. The folding technique is a downward cut and a gentle turn over and over using a spoon, rubber scraper, or wire whisk. The goal of folding is to keep as much air in the mixture as possible.
5. To ***knead*** is to thoroughly blend dough by working (pressing) it with the heels of the hands, stretching the dough, and folding it over on itself until smooth and elastic.
6. ***Meringue*** (meh-rang) is a mixture of egg whites and sugar beaten to increase the mixture volume. Meringue preparation is one of the important cooking methods used in numerous dessert and pastry preparations. In addition, meringue supplies leavening to angel and chiffon cake types. Three basic types of meringue are:
   a. Meringue Suisse (mĕh-raNG-swēēss) is the typical meringue mixture of egg whites beaten until stiff with extra fine (castor) sugar folded in. Typically, a

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meringue is folded into a thin batter or is baked in an oven until browned and/or crisp. Products include French macarons (macaroons), dessert shells, vacherin (vash-ĕ-ran), and garnishes or toppings for desserts or pastries. A ***vacherin*** is a cake made of large rounds of a meringue-like mixture; a famous example is a Pavlova dessert. It is layered with whipped cream (often Chantilly cream—sweetened or flavored) and sometimes with fruit.

b. Meringue Cuite (mĕh-raNG kwēēt) is a cooked meringue made by whipping egg whites and icing sugar together until it is very thick. It is usually whipped over gentle heat. Products include those that need to be moulded (e.g., baskets, petits fours, and cream bases).

c. Meringue Italienne is whipped egg whites onto which 260°F sugar syrup is poured. The mixture is whisked until thick and is used to cover dishes (e.g., Baked Alaska) or for pastries.

7. To ***mix*** is to beat or stir two or more foods together until they are thoroughly combined.
8. To ***sift*** is to remove large lumps from a dry ingredient (e.g., flour or confectioners' sugar) by passing them through a fine mesh sieve. This process incorporates air into the ingredients to make them lighter.
9. To ***whip or whisk*** is to incorporate air into ingredients by beating them until light, fluffy, thick, and stiff. Whipping or whisking can be accomplished with a hand whip, hand whisk, rotary beater, electric hand mixer, or a stand mixer.

F. Other recipe vocabulary

1. ***Batter*** is a semi-liquid mixture of flour, liquid, and other ingredients that can be poured (pancakes) or dropped from a scoop (cake batter). Many batters require a pan to encase them (e.g., cupcakes and popovers).
2. To ***coat*** is to evenly cover food—fish, cutlets, croquettes, etc. The main types of coatings are seasoned flour and beaten egg, dry breadcrumbs with beaten egg, and fritter batter.
3. A ***dash*** is a measure approximately equal to $^{1}/_{16}$ teaspoon.
4. ***Docking*** is making small holes in yeast dough (and sometimes pastry dough) before it is baked to release steam and promote even baking.
5. To ***dot*** is to sprinkle food with small bits of an ingredient (e.g., butter or crumb crust mixtures) to add moisture and/or protect the surface of a baked product.
6. ***Dough*** is a combination of ingredients—typically, flour, water or milk, and leavening—that produces a firm but workable mixture. Dough is often associated with baked goods, coverings, and crusts. It can be rolled.
7. To ***dredge*** is to lightly and evenly sprinkle a food item with seasoned flour, fine breadcrumbs, sugar, or cornmeal. Dredging is done in a paper bag or in a two-compartment pan in which food is dipped in beaten eggs and is quickly sprinkled with a seasoned dry coating.
8. To ***drizzle*** is to pour a thin liquid (e.g., a sweet glaze or melted butter) in a slow and light trickle over food. Thin icings are often drizzled in a set pattern.

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9. To ***dust*** is to sprinkle food lightly with spices, sugars, candies, nonpareils, flour, or seasoned flours or sugars.
10. A ***garnish*** is a decorative piece of an edible ingredient (e.g., parsley leaves, lemon wedges, croutons, or chocolate curls) placed as a finishing touch to improve the appearance of dishes and drinks and to enhance the flavor.
11. A ***glaze*** is a liquid that makes the surface of a food shiny or glassy. Examples are meat glazes (e.g., thick gravy or stock) and apricot or fruit jam glaze—used to brush over tarts, pies, and other pastries.
12. To ***grease and flour*** is to generously rub the interior of a baking pan with fat before lightly dusting it with flour to prevent batter from sticking to the pan. Any excess flour should be removed before adding batter to the pan.
13. To ***purée*** is to mash or pound food and to press it through a sieve or ricer. Puréed foods are typically thinned with cream, milk, stock, etc. Food may be puréed in a blender or food processor for a thick liquid.
14. To ***reduce*** is to cook (often simmer) liquids down (evaporating liquid) to concentrate flavor and thicken the liquid to a sauce or a paste.
15. To ***skim*** is to remove the top fat layer and/or scum (impurities) from stocks, soups, sauces, or other liquids.
16. To ***thin*** is to reduce a mixture's thickness with the addition of liquid.
17. ***Zest*** is the thin, brightly colored outer part of the rind of citrus fruits that contains essential oils. Zest is removed with a zester (a specialized cutting tool with tiny blades attached to a handle) or with a sugar cube.

Teaching Strategy: *Use VM–D through VM–P in a class discussion. Assign LS–A.*

Objective 3: Use nutrition terms.

Anticipated Problem: What are basic dietary terms?

III. Nutrition vocabulary

A. Nutrition vocabulary

1. ***Nutrients*** are substances from food and drinks that the body uses for energy, growth, upkeep, and repair. The six essential nutrients are:
   a. Carbohydrates
   b. Fats
   c. Minerals
   d. Proteins
   e. Vitamins
   f. Water

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2. ***Carbohydrates*** are nutrients in the form of sugar or starch, which is a main source of energy for the body. Each gram of carbohydrates provides 4 calories.
    a. Simple carbohydrates and simple sugars are sweet and are found naturally in milk, fruit, and refined sugars (e.g., granulated, confectioners, icing, and castor).
    b. Complex carbohydrates or starches are present in plant-based foods (e.g., grains, legumes, and some vegetables). They take longer to digest than simple carbohydrates. Some contain dietary ***fiber***—a form of indigestible and nonnutritive complex carbohydrate essential to a healthy diet. Dietary fiber is the part of edible plants that the body cannot digest, so the body "feels" full. Also, dietary fiber aids in digestion.
3. ***Fats*** (lipids) are nutrients that provide energy, promote healthy skin, and carry fat-soluble vitamins throughout the body.
    a. Fat is a triglyceride that remains solid at room temperature.
    b. ***Fatty acids*** are organic compounds consisting of a chain of carbon and hydrogen atoms attached to an acid group on one end. A fat-soluble vitamin dissolves in fat. Each gram of fat provides 9 calories.
    c. ***Hydrogenated fat*** is something chemically altered from a liquid (oil) to a solid fat. An example is margarine.
    d. ***Saturated fat*** is a triglyceride mostly made of saturated fatty acids, which are solid at room temperature. Saturated fatty acids are fatty acid chains in which each carbon atom is completely filled with hydrogen atoms found in animal-based foods, including:
        (1) Dairy (e.g., milk, cheese, butter, and cream)
        (2) Meat (e.g., lard) and poultry (e.g., duck, chicken, and goose fat)
        (3) Eggs (one yolk contains 4 g of total fat; only one-third of the total fat is saturated)
        (4) Shortening (The hydrogenation of unsaturated fatty acids is converted to a saturated fat; often it is used in baked goods and pre-packaged foods.)
    e. ***Unsaturated fatty acids*** are fatty acid chains that lack some hydrogen atoms. Unsaturated fatty acids are liquid at room temperature and are found in seafood and vegetable oils.
4. ***Minerals*** are inorganic nutrients required in small amounts to regulate body processes. They are classified as micronutrients (needed by the body in small amounts) found in soil and the water absorbed by plants. Major minerals are those with a recommended dietary allowance (RDA) of 100 mg per day. In contrast, trace minerals are those with an RDA of less than 100 mg per day.
    a. Major: Calcium is required for bone growth and formation, blood clotting, and nerve and muscle functioning. It helps regulate the passage of nutrients in and out of the cell walls, lowers blood pressure, is important to normal kidney function, and reduces blood cholesterol levels. It is the most abundant mineral in the body. In combination with phosphorus, it forms calcium phosphate—the dense, hard material of the teeth and bones.

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b. Major: Phosphorous works with calcium to build teeth and bone, helps manufacture proteins, filters waste from kidneys, and helps form DNA.
c. Major: Sodium helps maintain the amount of fluid surrounding body cells. It regulates the acid-base balance of the body.
d. Major: Chloride helps maintain the acid-base balance in the body. It also maintains blood volume and blood pressure.
e. Major: Magnesium keeps bones strong and assists numerous chemical reactions in the body.
f. Major: Potassium regulates normal heart functioning and muscle contraction. It is necessary for energy and protein production.
g. Trace: Iron is required to make proteins that distribute oxygen throughout the body.
h. Trace: Copper works with iron to form red blood cells.
i. Trace: Iodine is required to make hormones in the thyroid gland.
j. Trace: Zinc protects the immune system, regulates genetic material, and helps wounds heal.
k. Trace: Selenium helps maintain thyroid hormone function and a healthy immune system. It is found in meat, poultry, seafood, eggs, nuts, seeds, and whole grains.
l. Trace: Manganese facilitates protein and carbohydrate metabolism as well as bone formation. It helps maintain healthy nerves and the synthesis of fatty acids and cholesterol.

5. ***Proteins*** are energy-producing nutrients made from carbon, hydrogen, oxygen, and nitrogen assembled in chains of amino acids. They are complex organic compounds found in living plant and animal cells. Proteins build the body—bones, muscles, and skin. Proteins' amino acids are the building blocks of all living cells. Each gram of protein provides 4 calories. An egg is a complete protein; one whole egg contains 6 g of protein.
6. ***Vitamins*** are organic nutrients needed in small quantities to regulate body processes. Vitamins A, D, E, and K are fat-soluble vitamins, so they dissolve in fat. Vitamin C and the B vitamins are water-soluble, so they dissolve in water. Water-soluble vitamins are excreted daily and are not stored by the body. As a result, they must be replenished every day.
   a. Fat-soluble: Vitamin A is essential for healthy vision, proper growth and development, and a healthy immune system. The following foods are good sources of vitamin A: beef liver, eggs, butter, orange and yellow vegetables and fruits (e.g., carrots, sweet potatoes, squash, and cantaloupe), and green vegetables (e.g., spinach, kale, and collard greens).
   b. Fat-soluble: Vitamin D is required for proper kidney functioning, healthy teeth and bones, and the ability to absorb vitamin A, calcium, phosphorous, magnesium, iron, and zinc.
   c. Fat-soluble: Vitamin E strengthens the immune system and widens blood vessels, which reduces the occurrence of blood clots. Good sources of vitamin E are wheat germ as well as canola and olive oils. Nuts (almonds

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and seeds) are good sources, too. Grains, fruits, and vegetables contribute some vitamin E to the diet.

d. Fat-soluble: Vitamin K is essential to blood clotting and bone creation. Foods rich in vitamin K are green leafy vegetables, herbs, and spices.

e. Water-soluble: Vitamin C (ascorbic acid) protects the body from disease by improving immune functions and has antioxidant (a substance said to protect the body from the effects of free radicals) properties. Free radicals are unstable compounds produced during metabolism (digestion). Vitamin C produces collagen (the connective tissue found in skin, bones, teeth, ligaments, and tendons) and improves the absorption of iron from food. Foods rich in vitamin C are vegetables (e.g., broccoli, bell peppers, and tomatoes) and fruits (e.g., citrus fruit, strawberries, and cantaloupe).

f. Water-soluble: The B vitamins are crucial to energy production, nervous system function, and immunity.

(1) Thiamin (vitamin B_1) helps metabolize carbohydrates, regulates nerve impulses, and assists with heart and muscle functioning. Good sources of vitamin B_1 are tuna, pork, seeds, legumes, and whole grains. Enriched grain sources are breads and cereals.

(2) Riboflavin (vitamin B_2) helps energy production, growth, and red cell production. In addition, it activates vitamin B_6. Good food sources are beef liver, milk, other dairy, eggs, clams, nuts, and green leafy vegetables. Enriched foods include breads and grains.

(3) Niacin (vitamin B_3) promotes good skin, nerve, and digestive system functioning. Good food sources are meats, poultry, seafood, legumes, whole grains, nuts, and seeds. Milk and dairy foods and green leafy vegetables contain significant sources of niacin.

(4) Vitamin B_6 is necessary for metabolic, nervous system, and immune system functioning. In addition, it is used in the formation of hemoglobin (the protein in red blood cells that transports oxygen to the body). Good sources of vitamin B_6 are fruits and vegetables, animal proteins, legumes, nuts, and grains (whole and enriched).

(5) Vitamin B_{12} supports red blood cell and DNA formation, promotes proper nerve development, and plays a role in energy production. This B vitamin can be stored by the body and is found in animal-based foods (e.g., meat, poultry, seafood, eggs, and dairy).

(6) Other water-soluble vitamins are pantothenic acid (vitamin B_5), biotin (vitamin B_7), and folate (vitamin B_9).

7. ***Water*** is a liquid composed of two hydrogen atoms attached to one oxygen atom. It is the most important nutrient to the body. The human body is 60 percent water. Blood is approximately 80 percent water. The lungs are about 90 percent water. In addition, muscles and the brain are approximately 75 percent water. Also, water is necessary for digestion and for the absorption of nutrients. It helps regulate body temperature and cools the body.

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B. Nutrition facts label vocabulary

1. The ***Food and Drug Administration (FDA)*** is a federal agency responsible for monitoring trading and safety standards in the food and drug industries. It is committed to the protection of public health by regulating food products, human and animal prescription medications, medical devices, cosmetic products, tobacco goods, and a variety of other consumer items.
2. ***Artificial sweeteners*** are intensely sweet, synthetic substances with zero or nearly no calories and no nutritive value. They are reportedly not absorbed by the body and do not add any nutrients to the diet. Sweeteners replace sugar in processed foods. Artificial sweeteners are commonly found in diet soda and other beverages, candies, cookies, chewing gum, syrups, desserts, and some dairy products. The FDA has approved five artificial sweeteners to replace granulated and brown sugar and honey:
   a. Acesulfame K (200 times sweeter than sucrose)
   b. Aspartame (200 times sweeter than sucrose)
   c. Neotame (8,000 times sweeter than sucrose)
   d. Saccharin (200 to 700 times sweeter than sucrose)
   e. Sucralose (600 times sweeter than sucrose)
3. A ***calorie*** (kilocalorie) is a unit of heat energy; the amount of heat necessary to raise the temperature of 1 g of water by 1°C. Calorie counts are shown on Nutrition Facts labels.
   a. ***Calorie-free*** is a Nutrition Facts label term indicating the food/beverage has less than 5 calories per serving.
   b. ***Low-calorie*** is a Nutrition Facts label term indicating the food/beverage must have 40 calories or less per serving.
4. ***Cholesterol*** is a sterol from the lipid family—a soft, waxy substance—made by the body and found in all body cells and in food from animal origins (e.g., organ meat, red meat, poultry, seafood, egg yolks, and dairy). It is produced in the liver.
5. ***Enriched foods*** are edible items that have had nutrients added because they were lost during processing.
6. ***Fat-free*** is a food labeling term indicating less than 0.5 g of fat are present in each serving. ***Low-fat*** is a food labeling term indicating less than 3 g of fat are present in each serving. ***Reduced fat*** is a food label term that means a food must have 25 percent or less fat content than the regular product.
7. If a food is ***fortified***, it is an item with nutrients added to increase the nutritive value.
8. ***Gluten*** is a type of protein found in grains: wheat, barley, rye, triticale (a cross of rye and wheat), and some types of oats. Gluten-free diets exclude the gluten proteins and are used to treat celiac disease. Gluten causes inflammation in the small intestine of those with celiac disease.
9. ***Lean*** is a food labeling term indicating there is no more than 10 g of fat, of which saturated fat is no more than 4.5 g and less than 95 mg of cholesterol per 100 g serving. ***Extra lean*** is a food labeling term indicating there is less

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than 2 g of saturated fat, less than 5 g of overall fat, and no more than 95 mg of cholesterol in a 100 g portion of meat, poultry, game meat, or seafood.

10. ***Light*** is a food labeling term indicating a product contains one-third of the calories or half of the fat of the regular alternative.
11. ***Low-sodium*** is a food labeling term indicating a product contains less than 140 mg of sodium per serving.
12. ***Serving size*** is a specific amount of food (one portion) shown in standard units (e.g., tablespoons, cups, or ounces) on the Nutrition Fact's label.
13. ***Sugar-free*** is a food labeling term indicating a food contains less than 0.5 g of sugar per serving. In some cases, sugar-free indicates that the product was not made with natural sugars but may include artificial sweeteners.
14. ***Whole grains*** are items with only the husk removed.

Teaching Strategy: *Use VM–Q in a class discussion.*

Objective 4: Use menu terms.

Anticipated Problem: What are common menu terms?

IV. Menu vocabulary

A. Menu types

1. ***Á la carte*** (ah-lah-kart) is a menu that prices all food and beverage items separately.
2. A ***California menu*** is a list of food and beverage selections for any meal—breakfast, lunch, and dinner—for service throughout the day. Restaurants that offer California menus often are open 24 hours a day.
3. ***Prix fixe*** (prē-fiks) is a meal of several courses at one fixed price. This menu type offers limited choices of complete meals (all courses). Upscale restaurants typically use a prix fixe menu style.
4. ***Semi-á la carte*** is a menu that offers entrées accompanied by, and priced to include, the starch and vegetable and usually a choice of soup or salad. The appetizer and dessert courses are priced separately.
5. ***Table d'hôte*** (ta-bluh-dōt) is a menu that identifies specific items served with each course at a set price. It is similar to the prix fixe menu but does not limit customer choices.

B. Menu classifications

1. A ***cycle menu*** is a list of dishes written for a specific period and repeats after that period ends. This menu type is common in institutional foodservice settings (e.g., hospitals and school cafeterias).
2. A ***fixed menu*** is a list of dishes written for those that stay the same and/or rarely change. It is commonly found in quick-service restaurants and entertainment arenas where the entire organization has the same menu.

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3. A ***market menu*** is a list of dishes written for those that change often to make use of seasonal, peak, and locally available products. Alice Waters and Charlie Trotter were early proponents of the market menu. Now this menu type is common.

C. Sauce and stock vocabulary

1. ***Sauces*** are accompaniments served to enhance and/or add flavor, add moisture, and act as a binder (to hold food elements together). Knowledge of the following common menu terms is essential for BOH and FOH staff. BOH staff must demonstrate knowledge and performance of the sauces and stocks. FOH staff requires knowledge of the sauces and stocks to accurately address customer questions.
2. ***Au jus*** (ō-ZHoos) is a dish (typically meat dishes) served with its natural juices from cooking.
3. ***Broth*** is a thin or unclarified soup. It is much lighter than consommé or clarified soup and is made by gently cooking meat, seafood, vegetables, and/or bones and trimming (and often herbs) in liquid (e.g., water).
4. ***Espagñole*** (es-pahn-yole) is a mother sauce made from rich brown stock, brown roux, tomato purée, and a sweet (caramelized) mirepoix.
5. ***Hollandaise*** is a mother sauce and a butter sauce made by thickening melted butter with egg yolks and seasoning with peppercorns and lemon juice.
6. ***Mayonnaise*** is a thick, uncooked emulsion—a cold sauce—made by combining egg yolks, olive oil, wine vinegar or lemon juice, and seasonings (usually salt and pepper and sometimes mustard).
7. ***Mirepoix*** (mi(ĕ)r-pwä) is a flavoring of aromatic vegetables used to flavor stocks and in the preparation of meat, fish, and shellfish dishes; it is made with or without meat and bones. The mixture generally consists of the following proportions of diced vegetables: 50 percent onions, 25 percent carrots, and 25 percent celery. Mirepoix is one of the important cooking preparations as it serves as a foundation for many soups and sauces.
   a. The dice size is determined by the size of the bones in the stock mixture. Stocks made with large bones require a large dice vegetable mirepoix. In contrast, stock made with small bones—chicken or fish—requires a small dice vegetable mirepoix.
   b. Any mirepoix that is cut too small turns the stock cloudy because the vegetables disintegrate. If cut too large, the stock flavor does not develop.
8. ***Roux*** (roo) is a thickening agent made by cooking equal amounts (by weight) of butter and flour together over low heat. Slow cooking and heat develop the flavor of the thickening and allow the starch molecules in the flour to expand slowly to absorb as much liquid as possible. It is used to thicken soups and sauces. It is an important cooking method.
   a. To make a roux, it is necessary to measure equal amounts—by weight—of flour and fat (usually butter).
   b. Butter must be heated in a saucepan over medium-high heat until the "bubbles" disappear.

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c. The flour should be added to the butter and stirred constantly to blend the mixture and to allow the flour to absorb the butter. The longer the roux cooks, the darker it becomes.
d. The liquid (usually cold) should be gradually added to the hot flour and butter paste. The mixture will thicken.

9. The foundation of most soups and sauces, ***stock*** is the liquid that results from simmering nutritious ingredients—usually bones, meats, and vegetables. Stock can be made and used the same day, but it is generally better if it is at least one day old. Stock should be strained and poured into a non-reactive container and chilled immediately. The fat that rises to the top of the stock helps preserve it. The fat is removed before cooking. Three main stocks are brown, brown bone, and light.
   a. Brown stock—Meat, bones, and vegetables are browned before adding to the stockpot.
   b. Brown bone stock—Bones and vegetables are browned before adding to the stockpot.
   c. Light stock—Meat and vegetables are put directly into the stockpot without prior browning.
10. ***Tomato sauce*** is a mother sauce made by sautéing mirepoix, tomatoes, white stock, seasonings, and sometimes bacon ends and onion. These sauces can be strained (or puréed) or unstrained (chunky). Tomato small sauces include Provençale (pro-ven-sal), Bolognese (bo-lo-gne-say), Creole, and Spanish.
11. ***Béchamel*** (bay-cha-mel) is a white sauce and a mother sauce made with milk or cream thickened with white roux and seasonings (e.g., salt, pepper, onion, and nutmeg). ***Mornay*** is béchamel mixed with butter and grated cheese.
12. ***Velouté*** (veh-loo-tā) is a white sauce and a mother sauce prepared like béchamel but with white stock (e.g., chicken, veal, or fish). Supreme sauce is a velouté sauce with cream added.

Teaching Strategy: *Many techniques can be used to help students master this objective. Use VM–R and VM–S. Assign LS–B.*

Review/Summary. Use the student learning objectives to summarize the lesson. Have students explain the content associated with each objective. Student responses can be used in determining which objectives need to be reviewed or taught from a different angle. If a textbook is being used, questions at the ends of chapters may be included in the Review/Summary.

Application. Use the included visual master(s) and lab sheet(s) to apply the information presented in the lesson.

Evaluation. Evaluation should focus on student achievement of the objectives for the lesson. Various techniques can be used, such as student performance on the application activities. A sample written test is provided.

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Answers to Sample Test:

Part One: Matching

1. f
2. e
3. i
4. h
5. g
6. c
7. j
8. b
9. a
10. d

Part Two: Short Answer

1. To make a roux, measure equal amounts by weight of flour and fat (usually butter). Heat butter in a saucepan over medium-high heat until the "bubbles" disappear. Then add the flour to the butter and stir constantly to blend the mixture and allow the flour to absorb the butter. Gradually add the liquid (usually cold) to the hot flour and butter paste; the mixture thickens.
2. Mirepoix is a flavoring of aromatic vegetables used to flavor stocks and used in the preparation of meat, fish, and shellfish dishes. The mixture generally consists of the following proportions of diced vegetables: 50 percent onions, 25 percent carrots, and 25 percent celery.
3. Reduced-fat, low-fat, and fat-free foods differ in the following ways:
   a. Reduced fat means a food must have 25 percent or less the fat content than the regular product.
   b. Low-fat means a product has less than 3 g of fat per serving.
   c. Fat-free means there is less than 0.5 g of fat per serving.

Part Three: Completion

1. julienne
2. dice
3. butterfly
4. mince
5. poach
6. fillet
7. nutrients
8. braise
9. roux
10. meringue

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Sample Test

Name _____

Culinary Arts Terms

Part One: Matching

Instructions: **Match the term with the correct definition.**

a. eighty-six (86)
b. mise en place
c. side work
d. stiffed
e. gratuity
f. prix fixe
g. table d'hôte
h. campers
i. á la carte
j. California menu

_____1. A meal of several courses at one fixed price

_____2. A tip or money paid by customers directly to bartenders, servers, or other personnel for the services they have provided

_____3. A menu that prices all food and beverage items separately

_____4. Restaurant guests who linger at their table long after their meal courses have been completed

_____5. A menu that identifies specific items served with each course at a set price

_____6. Odd jobs, such as stocking shelves and supplies, cleaning, and/or rolling silverware, the serving staff is assigned when not serving customers

_____7. A list of food and beverage selections for any meal—breakfast, lunch, and dinner—for service throughout the day

_____8. A French cooking term meaning to "put in place"

_____9. An expression that sends the message the house has run out of an item or that an item is removed due to product expiration or menu changes

____10. A situation in which a customer leaves no gratuity or tip for the server or he or she does not tip a common amount (percentage)



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Part Two: Short Answer

Instructions: **Answer the following.**

1. List and describe the steps to prepare a roux.

2. Describe the components of a mirepoix including the approximate percent of each food item.

3. Describe how reduced-fat, low-fat, and fat-free foods differ.

Part Three: Completion

Instructions: **Provide the word or words to complete the following statements.**

1. A rectangular stick (baton or matchstick) of food approximately ⅛ × ⅛ × 2½-inches is a/an _____ shape.
2. Cube-shaped pieces cut into ⅛-inch squares are shaped like _____.
3. Two single fillets cut from a thick pork chop, thick beefsteak, or dressed fish or shellfish held together by a thin strip of uncut skin or flesh (or on the back or belly of a fish) is a _____ cut.
4. An exceptionally fine chop, stopping just short of making a paste is to _____.
5. To cook gently in a simmering liquid at 190° to 200°F is to _____.
6. To remove bones from meat, chicken, or fish is to _____.
7. Substances from food and drink that the body uses for energy, growth, upkeep, and repair are _____.
8. To use a combination cooking method of baking and steaming tough cuts of meat is to _____.
9. A thickening agent made by cooking equal amounts (by weights) of butter and flour cooked together over low heat is a/an _____.
10. A mixture of egg whites and sugar beaten to increase the volume of the mixture is _____.

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FRONT OF THE HOUSE (FOH)

Front-of-the-house dining areas come in different styles, including outdoor terrace and coffee shop.





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BACK OF THE HOUSE (BOH)

Back-of-the-house employees include chefs and dishwashers.





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BACK OF THE HOUSE EQUIPMENT

Reach-in Cake Shop Refrigerator



Walk-in Refrigerator



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MISE EN PLACE

Mise en place (meez-en-plas) is a French cooking term meaning to "put in place." In professional kitchens, it is a way to organize the workspace and complete preparations prior to cooking a dish and/or the beginning of the service time. A chef's organization of the cooking space and banquet service set-up are types of mise en place. Mise en place is arguably the most important cooking standard for a successful BOH employee.





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POACH



To poach is to cook gently in a simmering liquid—190° to 200°F. The liquid is barely moving while the food cooks. Poaching is one of the important and most versatile cooking methods. Silicone egg poachers allow the eggs to cook without touching the liquid. The wild salmon fillets are being poached in water.



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SAUTÉ

To sauté is to cook food quickly over very high heat in a small amount of fat. In these images, mushrooms and spinach are sautéed in a straight-sided pan. Slope-sided pans are used for omelets, crepes, and other types of pan-frying. An important tip when sautéing is to get the pan hot before the butter and oil are added. When the butter and oil stop "foaming," it is time to add the food items.

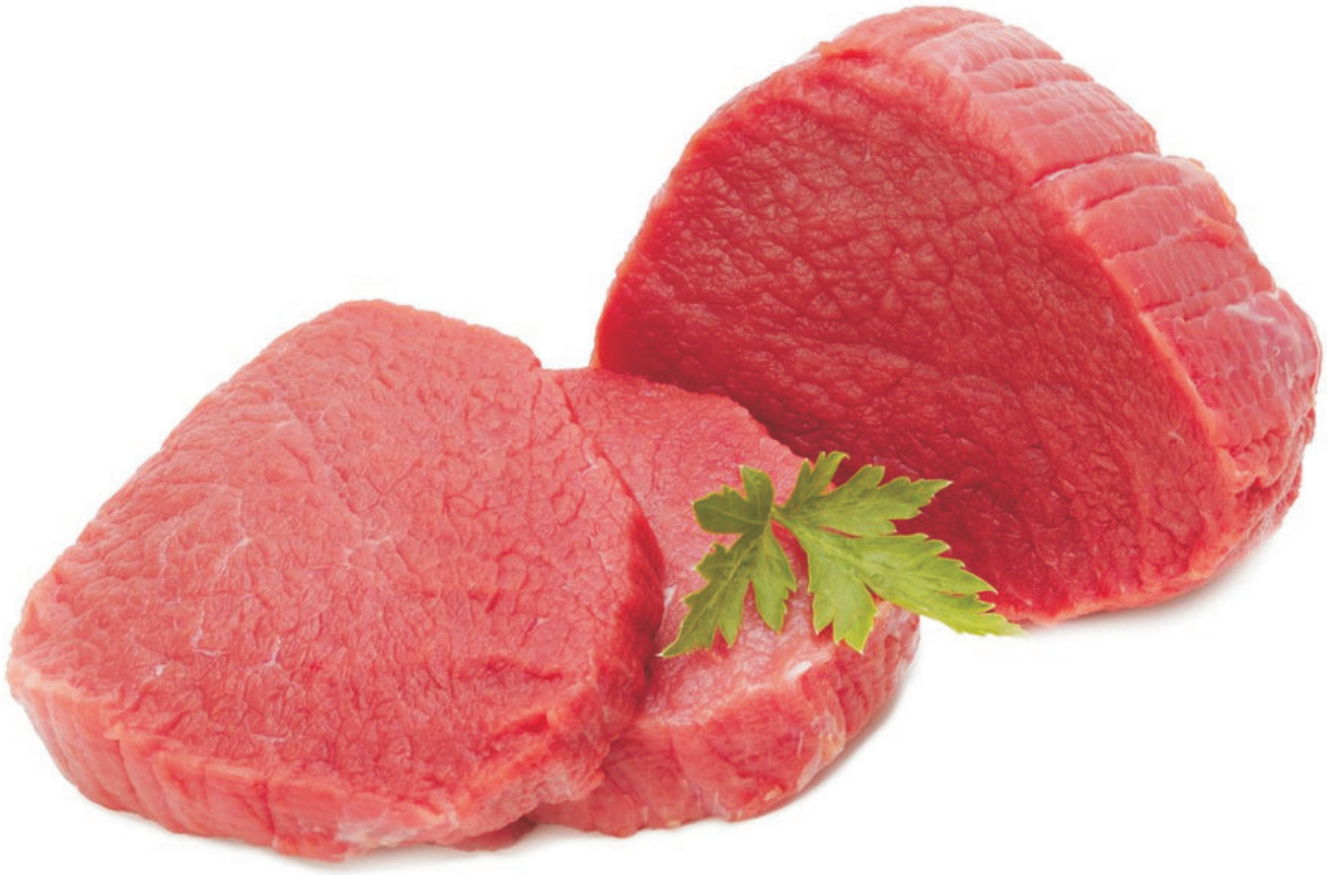




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BRAISE

Braising is a combination cooking method of baking and steaming tough cuts of meat. Braised meats are typically those with little marbling (fat) that require long, slow, moist-heat cooking methods to tenderize them.



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SEASONINGS



To season is to improve and/or enhance food by adding aroma and flavor. The most common seasonings are salt, pepper, mustard, onion, and garlic. What seasonings were selected to season these beefsteaks?

There are approximately 20 common herbs and spices in this image. Name them.



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BASIC KNIFE KIT

A chef usually has a minimum of four basic knives in a kit: French (or chef's), paring, slicer, and boning knife. Identify each in this image. Identify the parts of a good knife: haft, tang, bolster, rivets, edge, and spine.



Notice how this chef is holding his knife. He is gripping it just over the area where the metal ends and the handle (haft) begins. He is carving a roast rack of lamb.



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CUBE AND DICE

Cubes are small squares and are usually 1- or 2-inch pieces. Shish kebab ingredients are typically cut into 1- to 2-inch cubes.



Diced foods are cut into smaller square shapes than 1- or 2-inch cubes. This piece of beef is a large dice size at approximately ¾ × ¾ × ¾-inch cubes.



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CHOP AND MINCE

This parsley has been chopped—an irregular coarse cut—but it is not yet minced. To mince is to stop just short of making a paste as shown by this finely minced garlic.





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JULIENNE

Julienne (joo-lee-ENN) is a rectangular stick (baton or matchstick) of food approximately ⅛ × ⅛ × 2½ inches long. A fine julienne is approximately half as wide and deep and a bit shorter in length.



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CREAMING AND FOLDING



Creaming butter and sugar is a typical first step in making cakes, cookies, and bars.

Folding is a process to combine two mixtures: one light (e.g., meringue) and one heavier (e.g., chocolate mousse base). The folding technique is a downward cut and a gentle turn over and over using a spoon, rubber scraper, or wire whisk. The goal of folding is to keep as much air in the mixture as possible.



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KNEAD

Stand mixers have a dough hook attachment that assists in mixing bread dough. Kneading, however, is completed by hand. Kneading is a process used to thoroughly blend dough by working (pressing) it with the heels of the hands, stretching the dough, and folding it over on itself until smooth and elastic. Kneading develops the gluten structure.





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WHIP OR WHISK

Whipping or whisking is incorporating air into ingredients by beating them until light, fluffy, thick, and stiff. The process is usually accomplished with a hand whip or hand whisk for small quantities. However, rotary beaters, electric hand mixers, or stand mixers are used for larger quantities.





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MERINGUE



Meringue is a mixture of egg whites and sugar beaten to increase the volume of the mixture. Meringue preparation is one of the important cooking methods and is used in numerous dessert and pastry preparations. The most common type of meringue is Meringue Suisse. These desserts are examples of Meringue Suisse: French macarons are colorful buttercream-filled "cookies." Vacherin dessert shells are filled with custard cream and fresh fruit.



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FOOD LABELING

Nutrition Facts food labels must include serving size, calories, and nutrient information.

Nutrition Facts

Serving Size 5 oz. (144g)
Servings Per Container 4

Amount Per Serving

Calories 310	**Calories** from Fat 100
	% Daily Value*
Total Fat 15g	**21%**
Saturated Fat 2.6g	**17%**
Trans Fat 1g	
Cholesterol 118mg	**39%**
Sodium 560mg	**28%**
Total Carbohydrate 12g	**4%**
Dietary Fiber 1g	**4%**
Sugars 1g	
Protein 24g	
Vitamin A 1% •	**Vitamin C** 2%
Calcium 2% •	**Iron** 5%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories	2,000	2,500
Total Fat	Less Than	65g	80g
Saturated Fat	Less Than	20g	25g
Cholesterol	Less Than	300mg	300mg
Sodium	Less Than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Calories per gram:
Fat 9 • Carbohydrate 4 • Protein 4

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MIREPOIX



Mirepoix is a flavoring of aromatic vegetables used to flavor stocks. Also, it is used in the preparation of meat, fish, and shellfish dishes. The mixture generally consists of the following proportions of diced vegetables: 50 percent onions, 25 percent carrots, and 25 percent celery. Mirepoix is one of the important cooking preparations as it serves as a foundation for many soups and sauces. Are the aromatic vegetables shown in these images in the correct proportion for mirepoix?



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ROUX

Roux (roo) is a thickening agent made by cooking equal amounts (by weights) of butter and flour together over low heat. Slow cooking and heat develops the flavor of the thickening and allows the starch molecules in the flour to expand slowly to absorb as much liquid as possible.







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LS–A

Name _____

Professional Knife Cuts and Cooking Methods Video Research

Purpose

The purpose of this activity is to research professional knife cuts and cooking methods.

Objectives

1. Review your class notes about knife cuts and cooking methods.
2. Watch and record information (e.g., definitions, equipment names, and tips) from the video demonstrations.
3. Share your information.

Materials

- writing utensil
- class notes
- computer with Internet access

Procedure

1. Work individually to complete the following chart.
2. As you view the online videos, record the following information for each basic knife cut and cooking method. For items 9 and 10, make two selections of interest to you: knife cuts or cooking methods. Watch and record the YouTube or other link (e.g., AllRecipes, Food Network, or Epicurious) and the other table categories.



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Knife Cut or Cooking Method	Definition	URL Links	Culinary Equipment Required	Tips
1. Cube		https://www.youtube.com/watch?v=bZAnct6JYUg		
2. Dice		https://www.youtube.com/watch?v=kd6-1v2HCho		
3. Julienne				
4. Mince				
5. Deep-fry		https://www.youtube.com/watch?v=OVSHg5SCxR8		
6. Pan-fry		https://www.youtube.com/watch?v=NVjy1xvI5PA		
7. Poach		https://www.youtube.com/watch?v=UMiCy8EH1go		
8. Stir-fry		https://www.youtube.com/watch?v=kObfYtwoyeM		
9. _____				
10. _____				

3. Review your chart content with a classmate. Make any edits, especially adding more "Tips" to your chart.
4. Turn in your completed lab sheet to your instructor.
5. Use this chart to help complete LS–B.

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LS–B

Name _____

Demonstrate Professional Knife Cuts and Cooking Methods

Purpose

This purpose of this activity is to demonstrate professional knife cuts and cooking methods.

Objectives

1. Demonstrate four professional knife cuts using standard tools.
2. Demonstrate four professional cooking methods.
3. Use knives and equipment appropriately and safely.
4. Receive, record, and respond to coaching and feedback.

Materials

- LS–A
- class notes
- computer with Internet access
- writing utensil
- ruler
- cutting board and damp towel (to anchor the board)
- French chef, utility, boning, and paring knives
- vegetable oil
- eggs
- potatoes
- carrots
- broccoli
- scrap bowls (retain usable bits of vegetables for stocks and soups)
- two frying pans
- one sauce pan
- one wok
- spatula
- slotted spoon
- tongs
- four small plates to display each cut (Reuse the same four small plates for the cooking methods.)
- towels
- cleaning supplies

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Procedure

1. Complete this lab independently. (When necessary, share supplies, knives, and equipment with your lab group.)
2. Review your class notes and the YouTube demonstrations from LS–A about knife cuts and cooking methods.
   a. Create the knife cuts first using the available vegetables.
   b. Use eggs—along with the cut vegetables from your knife demonstration—to execute the four cooking methods. Use safe equipment and food-handling practices throughout the entire lab: pan-fry, stir-fry, poach, and one of your choices.
3. Pick up supplies and equipment selections.
4. Demonstrate four professional knife cuts: cube, dice, julienne, and mince or others as selected by you or designated by your instructor.
   a. Place one cut each on the four plates.
   b. Attach a label or table tent to each plate.
   c. Request feedback.
5. Demonstrate four cooking methods using eggs and the cut vegetables from Step 4.
   a. Place one cooked egg or egg dish on each of the four plates.
   b. Attach a label or table tent to each plate.
   c. Request feedback.
6. Complete the following table.

Knife Cuts and Cooking Methods	Knife &/or Equipment Selection	Record Feedback
1.		
2.		
3.		
4.		

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Knife Cuts and Cooking Methods	Knife &/or Equipment Selection	Record Feedback
5.		
6.		
7.		
8.		

7. Receive observational feedback from your instructor on safety and culinary techniques during and following the demonstrations.
8. Re-demonstrate any skills to develop your personal abilities with cuts and methods.
9. Compare and contrast the professional knife cuts and cooking methods of your classmates. Participate in a class discussion on the culinary techniques that worked well for you and for others.
10. List the knife cuts or cooking methods for which you would like to improve your technique.

11. Turn in your completed lab sheet to your instructor.

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