

# Professional Knife Skills

**Unit:** Preparing Foods

**Problem Area:** Food Preparation

**Lesson:** Professional Knife Skills

- **Student Learning Objectives.** Instruction in this lesson should result in students achieving the following objectives:

- 1 Demonstrate proper knife handling and safety.**
- 2 List the names and corresponding shapes of professional knife cuts.**

- **Resources.** The following resources may be useful in teaching this lesson:

“Basic Knife Skills,” *eGullet Society for Culinary Arts & Letters*. Accessed Feb. 15, 2011. <<http://forums.egullet.org/index.php?/topic/25958-basic-knife-skills/>>.

“Ceramic Knives vs. Metal Knives,” *eZinearticles*. Accessed Feb. 15, 2011. <<http://ezinearticles.com/?Ceramic-Kitchen-Knives-Vs-Metal-Knives&id=1902734>>.

Hertzmann, Peter. *Knife Skills Illustrated: A User's Manual*. W.W. Norton, 2007.

“How to Use a Chef's Knife,” *About.com*. Accessed Feb. 15, 2011. <<http://culinaryarts.about.com/od/knifeskills/ss/knifegrips.htm>>.

“iRubric: Knife Cut Assessment Rubric,” *Rcampus™*. Accessed Feb. 15, 2011. <<http://www.rcampus.com/rubricshowc.cfm?code=D2A88W&sp=yes&>>.



“Kitchen Knives: How to Care for Knives & How to Sharpen Knives,”  
*inmamaskitchen.com*. Accessed Feb. 15, 2011.

<[http://www.inmamaskitchen.com/cookware/sharpen\\_knives.html](http://www.inmamaskitchen.com/cookware/sharpen_knives.html)> .

Ward, Chad. *An Edge in the Kitchen: The Ultimate Guide to Kitchen Knives*.  
William Morrow Cookbooks, 2008.

Weinstein, Norman. *Mastering Knife Skills: The Essential Guide to the Most  
Important Tools in Your Kitchen*, with DVD. Stewart, Tabori, & Chang,  
2008.

## ■ **Equipment, Tools, Supplies, and Facilities**

- ✓ Overhead or PowerPoint projector
- ✓ Visuals from accompanying masters
- ✓ Copies of sample test, lab sheets, 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):

- |                       |                  |                     |
|-----------------------|------------------|---------------------|
| ▶ allumette           | ▶ cutting boards | ▶ paring knives     |
| ▶ batonnet            | ▶ emincer        | ▶ paysanne          |
| ▶ bias                | ▶ fine brunoise  | ▶ rondelle          |
| ▶ bolster             | ▶ French knives  | ▶ sharpening handle |
| ▶ boning knives       | ▶ guiding hand   | ▶ sharpening steel  |
| ▶ brunoise            | ▶ haft           | ▶ sharpening stone  |
| ▶ chef's knives       | ▶ heel           | ▶ slicers           |
| ▶ chiffonade          | ▶ honing         | ▶ spine             |
| ▶ chop                | ▶ julienne       | ▶ tang              |
| ▶ claw grip           | ▶ knives         | ▶ tourné            |
| ▶ cross-contamination | ▶ mince          |                     |

## ■ **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.

*Most students will enter this lesson feeling some sense of confidence that using a knife is a skill they possess. Yet there may be knife skills they do not know, and mastering the information is essential to mastering knife usage. It is important not to embarrass students about the knife skills and terms they need to develop and learn.*

*Ask five students to come to the front of the room where you have five cutting boards, five chef's knives, and a medium potato on each board. Direct the*

students to cut the potato into a medium dice, and offer no further instructions. Answer no questions. Allow students to cut their potatoes and then compare them. More than likely, the potatoes will be cut incorrectly in size, and the five examples may all be different. Make sure all the students in the class compare the results.

Without a standard, the term “medium” can suggest endless variables, but knife skills are an exacting skill. Remind students that whether for a stir-fry or a garnish or most anything in between, cut foods should be uniform. Explain that knowing what the terms mean (and the standards associated with the terms) is essential.

## CONTENT SUMMARY AND TEACHING STRATEGIES

**Objective 1:** Demonstrate proper knife handling and safety.

**Anticipated Problem:** What is the proper way to handle a knife? What are the guidelines for knife safety?

### I. Knife handling and safety guidelines

A. **Knives** are cutting tools comprised of a sharp blade fastened to a handle. Knives are considered the most important tools in the kitchen. For speed, accuracy, and professional appearance of food items, cuts must be clean and accurate. Many chefs purchase their own knives, personally maintain them, and let no one else use them. Some foodservice operations rent knives for their employees and receive freshly sharpened knives on a monthly or quarterly basis. Chefs usually have a minimum of four basic knives in a kit: French (or chef’s) knife, paring knife, slicer, and boning. Other common knives are butcher, cleaver, serrated, flexible blade (straight and off-set spatulas and icing knives), and spreaders. They all have specific uses and functions.

1. **French knives** or **chef’s knives** are knives that have a heavy, wide blade with a curved, pointed end. They are the most frequently used knives in the kit. The most common blade length is 12 inches. French knives are used to slice, chop, dice, and mince.
2. **Paring knives** are knives that have a 2½- to 3-inch blade with a pointed or curved tip. They are most frequently used to peel and/or prepare fruits and vegetables. The tip may be used to “eye” potatoes, remove stems from tomatoes, and remove blemishes from fruits and vegetables.
3. **Slicers** (utility knives) are tools that usually have a serrated or fluted edge. Typically, they are used to carve cooked meats and to slice breads.

4. **Boning knives** are short knives, about 6 to 8 inches in length, with a narrow, curved, and pointed blade. They are used to remove raw meat from the bone, with a minimal amount of waste.

#### B. Knife parts

1. Blade—The blade includes the point, edge, grind, and tang. When viewed under a microscope, a knife's edge is a series of hundreds of microscopic saw-like teeth. Each time a knife is used, these teeth become a bit crooked. Honing is the process used to straighten the teeth and reduce the number of times per year that a knife needs to be fully sharpened.
2. Tang—The **tang** is the extension of the blade into the handle. A high-quality knife has a full tang (runs the entire length of the handle and is often visible on the top and bottom of the haft) that is riveted to the handle. A knife used for heavy work (e.g., splitting lobster and halving squashes) should have a full tang. A knife not used for heavy work may have a partial tang (sometimes visible in the haft) or a rat-tail tang (a narrow shaft of the blade embedded in the haft but not visible on the top or bottom of the haft).
3. Haft—The **haft** is another term for handle.
4. Bolster—A French knife has a **bolster** (thick heavy steel collar or shank at the point where the handle meets the spine of the blade) forged as part of the blade. A bolster is a characteristic of a knife intended to last a long time. The thickness of the bolster is an indication of the original thickness of the steel used to forge the knife. A bolster helps balance the knife and prevents fingers from slipping while working. As a result, it prevents blisters and fatigue. A French knife also has a **spine** (the top non-cutting part of the blade). The spine is the place in which the chef's non-cutting hand rests while chopping and mincing.

#### C. Guideline 1: Basic knife safety

1. Storage
  - a. Knife edges should be kept protected by storing them in knife kit bags, a wall-mounted sheath, a magnetic wall strip or wooden and/or hard rubber block units. The wall and block units allow for free access. A knife stored in a knife block must be clean and dry to prevent bacteria from developing in the knife slot.
  - b. Drawer inserts cover knife blades in an organized fashion.
  - c. Blade sheaths for individual knives cover blades.
  - d. Inserts and sheaths make drawer storage acceptable. Knives should not be stored loose in drawers where they may become dull or damaged by impact with other knives or metal objects. Also, storage in a drawer insert reduces the risk that someone may reach into the drawer and accidentally grab a blade.
  - e. It is necessary to hand wash knives to prevent dulling due to high dishwasher temperatures and nicks from contact with other metal objects.

2. Passing knives to other people
    - a. The safest way to pass a knife to another person is for one person to set the knife down on a table and allow the next person to pick it up by the handle. Handing a knife to another person always exposes one person to the blade end, and this is an unacceptable safety risk.
    - b. Professional safety guidelines require that a person using a knife put the knife down when, for any reason, he or she is interrupted from work. Failure to pay attention while cutting is a common reason for careless cuts and injuries.
  3. Sharp blades
    - a. A dull knife is more hazardous than a sharp knife. A standard rule of knife safety is to keep the blades as sharp as possible.
    - b. Dull blades require more force (pressure) when cutting, which can result in knives slipping off the food and causing cuts to the hand holding the food. Therefore, sharp blades are a safety essential.
- D. Guideline 2: Keeping knives sharp
1. The best quality knife blades have traditionally been forged from carbon steel and have a high temper (degree of hardness; the harder the metal, the longer the edge will hold—stay sharp). Carbon steel blades have the best edge but do tend to lose sharpness quickly. They also stain easily (especially when coming in contact with high acid foods), but stainless steel blades do not. High-carbon stainless steel blades are quite common. Although they hold an edge longer than carbon steel, they are more difficult to sharpen.
  2. **Honing** a blade is the process of addressing only the thin cutting surface and immediate edges of the blade by drawing both sides at a 20-degree to 22.5-degree angle against a steel four to five times per side prior to or after every use. A **sharpening steel** is a heavy metal cylindrical, oval, or flat rod attached to a handle that has a slightly rough texture (for friction). It is made of a metal that is denser than the knife metal. Eventually all knives will dull to the point that honing will be insufficient and full sharpening will be required. A small “ceramic steel” is also available (the Zip-Zap) at a 92-degree hardness on the Rockwell scale. It is harder than any metal steel sharpener. In contrast to metal steels, the Zip-Zap is moved over the blade rather than the blade being drawn across the steel.
  3. Machine sharpening—Full sharpening of smooth, non-serrated blades can be done by machine, in which both sides of the blade are ground against a spinning internal stone or metal wheel.
  4. Hand sharpening—Full sharpening of smooth, non-serrated blades may be done by hand using a dry, wet, or oiled abrasive **sharpening stone** (sometimes carborundum stone—a silicon carbide material and sometimes whetstone—silicon dioxide) approximately 8 inches × 2 inches × 1-inch thick. Most sharpening stones have a rough grit side and a smoother side. It is nec-

essary to begin sharpening on the rough side and to finish on the smooth grit side.

- a. To sharpen by hand, it is necessary to place a cutting board on a counter or table and to put the stone on the board. A wet towel should be placed under the stone to keep it from moving.
  - b. The knife blade should be dragged along the stone at a 22.5-degree angle beginning at the tip of the knife and ending at the handle or vice versa but using the same action. (Most factory sharpened knives have a precise 22.5-degree angle.) It is essential to finish one side and then the other, with about 20 passes on each side.
5. Full sharpening of smooth, non-serrated blades may be accomplished by dragging the knife blade through a hand-held stationary **sharpening handle** (a stone cutout mounted in the middle of the handle that is held flat on a table while the knife is drawn through). Many Santoku knives are purchased with a hand-held sharpening handle.
- a. Fully sharpening a serrated knife involves separately sharpening each groove. A special small file, called a sharpening hone, is used for this purpose. It resembles a small screwdriver. However, many chefs simply replace a serrated knife approximately every five years.
  - b. A knife is sharp when it cuts a tomato or onion without pressure. A knife usually needs to be sharpened at least three times per year, depending on how much it is used and how many people are using it.

E. Guideline 3: Using cutting boards

1. **Cutting boards** are surfaces on which food is placed for cutting. They protect the surface of a preparation table and protect the knife blade. Cutting boards are typically constructed of end grain hard woods (e.g., maple), hard rubber, or polyethylene plastics. Safe knife handling requires that all food items be cut on a flat surface, specifically cutting boards that are easy to move, clean, and sanitize.
2. Cutting boards protect a sharpened and/or honed knife's edge by providing a softer base for the knife to contact than a stainless steel tabletop, thereby protecting the blade from premature dulling.
3. Allowing the knife to "dig into" a soft surface also prevents knife slippage to one side. Additionally, most chefs place a damp towel or rubber pad between the cutting board and the table to ensure the board does not slide.

F. Guideline 4: Holding knives

1. Professionals take great care to hold a knife properly. Proper grip secures the knife in the hand and provides more strength and control in the application of the knife to the task.
2. The hand should grasp the knife just below the spot where the blade meets the handle (known as the **heel** of the knife) by curling the third, fourth, and fifth fingers around the handle, placing the index finger opposite the thumb (or on the top of the blade), and pressing in against the bottom back end of the

blade. Then the thumb is pressed against the back inside portion of the blade. This grasp is the optimal way to hold virtually all knives.

3. Many non-professionals place their index fingers along the top spine of the knife, with the thumb and remaining fingers on opposite sides. This grip does not provide strength and control for optimal knife usage.
4. The **guiding hand** is the non-knife hand. It secures the food and keeps it from sliding around while cutting. To help ensure that no injuries are sustained to the guiding hand, chefs use a **claw grip**, which is a way in which a knife is held with the fingers curled inward and the food held with the fingernails while the side of the French knife blade rests against the first knuckle of the guiding hand.

#### G. Guideline 5: Sanitizing

1. Professional knife usage requires the sanitary use of knives. Cutting raw meats, poultry, fish, and shellfish exposes knives (and cutting boards) to bacterial contaminants. Proper washing and sanitizing of knives and cutting boards after each use helps prevent cross-contamination. According to the National Institute for the Foodservice Industry (NIFI), **cross-contamination** is the “transfer of harmful microorganisms from one food to another by means of a non-food surface, such as utensils, equipment, or human hands.”
2. Cross-contamination via a cutting board or knife is preventable.
  - a. Hard rubber or polyethylene cutting boards should be used rather than wooden boards that may become scored and difficult to keep clean.
  - b. It is essential to avoid using the same knife and cutting board to cut raw chicken and cooked chicken (or other protein foods) without cleaning and sanitizing between tasks.
  - c. A different knife and cutting board should be used for raw or cooked protein foods and for cut vegetables and fruits. Several options exist to color code knives and cutting boards for specific tasks.
  - d. It is necessary to clean and sanitize knives and cutting boards between uses regardless of the tasks.
  - e. Additionally, the washing of knives should be done with great care, never putting them in filled sinks where someone could unknowingly reach in and be injured. It is recommended that chefs and cooks wash and dry their own knives.

#### H. Guideline 6: Matching the knife to the task

1. Professional knife skills require the use of the proper knife for a given task. Most professional cuts (but not all) are typically done with a French knife.
2. Cleavers are best for cutting through bone and cartilage.
3. Boning knives are best for removing flesh from bones.
4. Paring knives are best for peeling and trimming.
5. Serrated knives are best for sawing through delicate items.
6. Utility knives are used for small, general-purpose tasks.

## I. Knife safety tips

1. It is essential to use the correct knife for the job.
2. To avoid injuries, a person should never try to catch a falling knife!
3. A knife's presence should be kept obvious to avoid serious cuts. Therefore, knives should not be "hidden" under a pile of trimmings or in a sink full of dirty dishes.
4. People should always cut, sharpen, and hone away from their bodies.
5. Knives should be kept sharp. Dull knives can cause accidents.
6. Knives should not be used to pry open cans or jars.
7. The claw grip should be used to safely hold food while cutting.

**Teaching Strategies:** *Demonstrate the correct process to sharpen and hone a knife. An alternative would be to show a video of sharpening and honing, such as <http://video.about.com/culinaryarts/Sharpen-Knives-With-a-Whetston.htm>. Reinforce your own lab preference for storage, honing (before or after each use), and sharpening (once per quarter, once per month, etc.). Then have the students sharpen and hone smooth, non-serrated knives while you coach and evaluate their performance.*

*You may need to show students how to estimate 22.5 degrees by illustrating a 90-degree angle, a 45-degree angle, and a 22.5-degree angle. Use VM-A to illustrate some knife storage options. Use VM-D, VM-E, and VM-F to illustrate professional knife cuts. Assign LS-A to be completed in concert with your in-class knife cuts demonstration and/or video presentations.*

**Objective 2:** List the names and corresponding shapes of professional knife cuts.

**Anticipated Problem:** What are the names and shapes of professional knife cuts?

## II. The names and shapes of professional knife cuts

### A. Circular and oval shapes

1. **Rondelle** is a crosswise cut of a tubular-shaped food, resulting in a round disc shape. A rondelle cut is generally about  $\frac{1}{4}$ -inch thick. When a rondelle cut is made on an angle, it creates an oval shape.
2. **Bias** are cuts made at a 45-degree angle that create a wider and longer oval rondelle. There is no standard thickness for foods cut on the bias. For instance, carrots might be cut in  $\frac{1}{4}$ -inch thick pieces, while flank steak might be cut as wide as 1-inch strips. The main advantage of a bias cut is to create equal-size pieces that cook at the same rate.

### B. Rectangular matchstick shapes

1. **Batonnet** (bah-tow-NAY) is a rectangular matchstick shape measuring  $\frac{1}{2} \times \frac{1}{2} \times 2\frac{1}{2}$  to 3 inches in length. This is approximately the size of a French fry.
2. **Allumette** (al-yoo-MET) is a rectangular matchstick shape measuring  $\frac{1}{4} \times \frac{1}{4} \times 2\frac{1}{2}$  inches in length.

3. **Julienne** (joo-lee-ENN) is a rectangular matchstick (baton) shape approximately  $\frac{1}{8} \times \frac{1}{8} \times 2\frac{1}{2}$  inches in length. A fine julienne is approximately half as wide and deep and a bit shorter in length.
4. **Emincer** (AH-mon-say) is a thin matchstick shape, similar to a julienne, but it usually refers to strips of meat.

C. Cube shapes

1. **Fine brunoise** is a  $\frac{1}{16} \times \frac{1}{16} \times \frac{1}{16}$ -inch square cube.
2. **Brunoise** (BROON-whaz) is a  $\frac{1}{8} \times \frac{1}{8} \times \frac{1}{8}$ -inch square cube.
3. Small dice is a  $\frac{1}{4} \times \frac{1}{4} \times \frac{1}{4}$ -inch square cube.
4. Medium dice is a  $\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2}$ -inch square cube.
5. Large dice is a  $\frac{3}{4} \times \frac{3}{4} \times \frac{3}{4}$ -inch square cube.

D. Irregular chop shapes

1. **Chop** are irregular shape cuts, approximately  $\frac{1}{8}$ -inch thick by  $\frac{1}{2}$ -inch long. The chop is one of the most common cuts made by chefs.
2. **Mince** is an exceptionally fine chop, stopping just short of making a paste. 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 needed.

E. Special shapes

1. **Tourné** (TOUR-nay) is an approximately seven-sided oblong “football-shaped” item (often used as a cut for hard vegetables), about 2 inches long and about  $\frac{1}{2}$  to 1 inch wide. This shape requires multiple cuts that result in a barrel shape.
2. **Chiffonade** (SHIF-ah-nod) is a fine ribbon cut or shred of leafy herbs or vegetables. The leaves are tightly rolled into a cylindrical shape, so there are multiple layers to which  $\frac{1}{8}$ -inch wide crosswise cuts are made. The result resembles fine shreds or ribbons. Most chiffonades are used as garnish for soup or sauce.
3. **Paysanne** (PAY-zon) is a half-moon, square, rondelle, or triangle-shaped tile shape, about  $\frac{1}{2} \times \frac{1}{2} \times$  about  $\frac{1}{8}$ -inch thick. This shape requires multiple cuts to achieve the tile shapes.

**Teaching Strategies:** Use VM–B and VM–C. Demonstrate basic knife cuts and/or use the websites shown in the Resources section. Project images. As students demonstrate the basic knife cuts, you may wish to use additional videos, such as the following: <http://culinaryarts.about.com/od/knifeskills/ss/onionchop.htm>; <http://video.answers.com/how-to-bias-cut-with-a-kitchen-knife-244080840>; <http://video.answers.com/how-to-chiffonade-cut-with-a-kitchen-knife-244080846>; <http://www.slashfood.com/videos-partner/what-is-a-julienne-cut-297708869-56>; <http://www.youtube.com/watch?v=vl2dhlh8yC8>; and <http://www.youtube.com/watch?v=mUUc8TYgQGw&feature=related>. Assign LS–B. A sample rubric to assess knife cuts is listed in the Resources section.

- **Review/Summary.** Use the student learning objectives to summarize the lesson. Questions at the ends of chapters in the textbook may also be used.
- **Application.** Use the included visual masters and lab sheet 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.

## ■ **Answers to Sample Test:**

### **Part One: Matching**

1. b
2. f
3. e
4. a
5. d
6. c

### **Part Two: True/False**

1. T
2. F
3. T
4. T
5. F
6. T
7. F
8. T
9. T
10. F

### **Part Three: Completion**

1. hone
2. claw grip
3. batonnet
4. paysanne
5. 22.5
6. cross-contamination
7. French (or chef)
8. boning
9. haft
10. control

# Professional Knife Skills

## ► Part One: Matching

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

- |              |               |
|--------------|---------------|
| a. tourné    | d. julienne   |
| b. brunoise  | e. chiffonade |
| c. allumette | f. rondelle   |

- \_\_\_\_ 1. A  $\frac{1}{8} \times \frac{1}{8} \times \frac{1}{8}$  inch square cube
- \_\_\_\_ 2. A crosswise cut of a tubular-shaped food, resulting in a round disc shape
- \_\_\_\_ 3. A fine ribbon cut or shred of leafy herbs or vegetables
- \_\_\_\_ 4. An approximately seven-sided oblong “football-shaped” shape
- \_\_\_\_ 5. A rectangular matchstick (baton) shape approximately c H c H  $2\frac{1}{2}$  inches in length
- \_\_\_\_ 6. A rectangular matchstick of shape measuring  $\frac{1}{4} \times \frac{1}{4} \times 2\frac{1}{2}$  inches in length

## ► Part Two: True/False

**Instructions: Write T for true and F for false.**

- \_\_\_\_ 1. Cutting boards protect knife blades.
- \_\_\_\_ 2. Soaking knives in a sink full of pots and pans is recommended to insure the knives are well cleaned.
- \_\_\_\_ 3. Storing knives loosely in drawers is a safety hazard.
- \_\_\_\_ 4. Knives are successfully sharpened by hand on a sharpening stone.
- \_\_\_\_ 5. Professionals can safely cut foods by holding knives by their blades.
- \_\_\_\_ 6. Mincing is an exceptionally fine chop, stopping just short of making a paste.



- \_\_\_\_ 7. Cutting on the bias creates a cube shape.
- \_\_\_\_ 8. Knives are considered the most important tool in the kitchen.
- \_\_\_\_ 9. When viewed under a microscope, a knife's edge is a series of hundreds of microscopic saw-like teeth.
- \_\_\_\_ 10. Make knife cuts toward your body.

### ► Part Three: Completion

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

1. Steels are designed to \_\_\_\_\_ a knife blade.
2. The guiding hand that holds the food should usually be in the \_\_\_\_\_ position to protect the fingers.
3. The rectangular cut that is  $\frac{1}{2} \times \frac{1}{2} \times 2\frac{1}{2}$  to 3 inches long is called \_\_\_\_\_.
4. Small tile-shaped pieces in round, half-moon, square, or triangle shapes, about  $\frac{1}{2} \times \frac{1}{2} \times$  about  $\frac{1}{8}$ -inch thick are called the \_\_\_\_\_ cut.
5. A knife should be pulled against a sharpener at approximately a \_\_\_\_\_-degree angle.
6. To prevent \_\_\_\_\_ between raw meat and other foods, knives and cutting boards must be cleaned and sanitized between uses.
7. Most of the standard professional knife cuts are done using a \_\_\_\_\_ knife.
8. A chef usually has a minimum of four basic knives in a kit: French (or chef's) knife, paring knife, slicer, and \_\_\_\_\_.
9. The professional term for the handle of a knife is the \_\_\_\_\_.
10. Proper grip secures the knife in the hand and provides more strength and \_\_\_\_\_ in the application of the knife to the task.

# KNIFE STORAGE OPTIONS

- ◆ Storing knives in a wooden block is an example of safe knife storage. Are these knives full tang?



- ◆ A magnetic and wall-mounted knife strip allow knives to air dry and makes handles readily available to the chef.

# BASIC KNIFE KIT AND SHARPENING OPTIONS

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



◆ A French knife with sharpening steel for honing the blade's edge.



- ◆ Chefs save money by sharpening their knives using a whetstone that has a coarse and a fine surface.



- ◆ Smooth, non-serrated knives may be sharpened by dragging the knife blade through a hand-held stationary sharpening handle (a stone cutout is mounted in the middle of the handle that is held flat on a table while the knife is drawn through). Many Santoku knives are purchased with a hand-held sharpening handle.



# KNIFE GRIPS

- ◆ Notice how this chef is holding the knife—gripping it just over the area where the metal ends and the handle (haft) begins.



- ◆ Contrast these two knife grips. Which grip exposes the guide hand and makes it vulnerable to cuts? Which grip shows the guide hand in the preferred claw grip position?



# PROFESSIONAL KNIFE CUTS: RONDELLE, BIAS, AND JULIENNE

## Circular and Oval Shapes

- ◆ Rondelle is a crosswise cut of a tubular-shaped object, resulting in a round disc.



- ◆ Bias cuts are made at a 45-degree angle that creates a wider and longer oval rondelle.



## Rectangular Matchstick Shapes: Julienne and Emincer



- ◆ Julienne (joo-lee-ENN) is a rectangular stick (baton or matchstick) of food approximately  $\frac{1}{8} \times \frac{1}{8} \times 2\frac{1}{2}$  inches long. A fine julienne is approximately half as wide and deep and a bit shorter in length. Emincer (AH-mon-say) is a thin slice similar to a julienne, but it usually refers to strips of meat.

# PROFESSIONAL KNIFE CUTS: DICE, CHOP, AND MINCE

- ◆ Diced foods are cut in a cube shape, such as this large diced piece of steak. It is approximately a  $\frac{3}{4} \times \frac{3}{4} \times \frac{3}{4}$ -inch cube. Cutting a brunoise (BROON-whaz) style is much smaller, creating a  $\frac{1}{8} \times \frac{1}{8} \times \frac{1}{8}$ -inch cube.



- ◆ This parsley has been chopped—an irregular coarse cut—but it is not yet minced. Mince is a much finer cut that stops just short of making a paste, as shown by this minced garlic.



# SPECIAL KNIFE CUTS: CHIFFONADE AND TOURNÉ

- ◆ The leaves of collard greens are tightly rolled into a cylindrical shape. Rolling leaves together is the first step in preparing a chiffonade (SHIF-ah-nod)—creating multiple layers. Then 1/8-inch wide crosswise cuts are made, resulting in what looks like fine shreds or ribbons.



- ◆ This roast beef dinner is shown with bite-sized carrots and potato in a tourné (TOUR-nay) cut. Tourné is a barrel- or football-shape cut that typically results in a seven-sided piece of food.



# Illustrate Professional Knife Cuts

## Purpose

This purpose of this activity is to illustrate professional knife cuts.

## Objectives

1. Watch a demonstration of or research professional knife cuts online and offline.
2. Record the term for each knife cut.
3. Draw the actual size and shape of each knife cut.
4. Record the dimensions of each knife cut.
5. Write your “walking definition” to describe each knife cut.

## Materials

- ◆ lab sheet
- ◆ writing utensil
- ◆ ruler

## Procedure

1. Work individually to prepare an “Illustrated Record of Professional Knife Cuts.”
2. As you watch an instructor demonstrate, view online videos, and/or use reference materials, record the following for each basic professional knife cut in the Illustrated Professional Knife Cuts Chart provided:
  - a. Term and pronunciation guide
  - b. Drawing in actual size
  - c. Size dimensions (e.g., length, width, and height when necessary)
  - d. Your “walking definition” (in your own words) description of each cut



### Illustrated Professional Knife Cuts Chart

Term	Drawing	Dimensions	Description
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

Term	Drawing	Dimensions	Description
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			

3. Review your terms, drawings, and dimensions with a classmate. Make any needed adjustments to your chart.
4. Turn in your completed lab sheet to your instructor.
5. Add your Illustrated Professional Knife Cuts Chart to your portfolio.
6. Use your chart to complete LS–B.

# Illustrate Professional Knife Cuts

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1. This lab sheet could accompany your lab demonstration of the professional knife cuts and/or could accompany any online videos you may share with students.
2. This lab sheet could be illustrated directly into the students' lab portfolio of terms and procedures rather than becoming an independent tool.
3. The Illustrated Professional Knife Cuts table parallels the names and shapes of the 16 cuts referenced in Objective 2 of this lesson plan. Other cuts and more spaces could be added to this lab.
4. LS-A is designed as a guide for students to complete LS-B.

# Demonstrate Professional Knife Skills and Cuts

## Purpose

This purpose of this activity is to practice several professional knife cuts.

## Objectives

1. Demonstrate 10 professional knife cuts.
2. Select the appropriate knife for each cut.
3. Hone or sharpen your knife prior to the demonstration.
4. Grip the knife safely.
5. Hold your guide hand in the claw grip when necessary.
6. Perform the knife cuts for your instructor.
7. Receive coaching and feedback from your instructor during the lab.
8. Redo any knife cuts as a result of feedback.
9. Select your best six professional knife cuts for evaluation by peers and your instructor.
10. List the knife cuts for which you would like to improve your technique.

## Materials

- ◆ lab sheet
- ◆ writing utensil
- ◆ LS-A for reference
- ◆ writing utensil



- ◆ ruler
- ◆ cutting board and damp towel to anchor the board
- ◆ French chef or utility knife
- ◆ sharpening tools (e.g., carborundum, whetstone, or sharpening handle)
- ◆ potatoes or carrots
- ◆ scrap bowls for retaining usable bits of the vegetables
- ◆ 10 small plates to display each cut
- ◆ towels
- ◆ cleaning supplies

### Procedure

1. Complete this lab independently.
2. Hone or sharpen your knife.
3. Based on text, video, or in-class demonstration, execute the following seven professional knife cuts and three more of your choosing. List your knife cut choices and the knife you selected for each cut in the spaces provided. Use a safe knife grip and appropriate guiding hand positions, such as the claw grip to accomplish each cut.

Professional Knife Cut	Knife Selection
a. Bias cut	
b. Batonnet	
c. Allumette	
d. Julienne	
e. Medium dice	
f. Small dice	
g. Brunoise	
h.	
i.	
j.	

4. Receive coaching and feedback from your instructor. Repeat the cuts several times to create as identical a set of cuts as possible. You will notice that by beginning with the larger cuts (e.g., batonnet, allumette, and then julienne) and moving to the smaller ones, there is a natural progression allowing you to use one cut item as the basis for the next one.
  5. Plate about three to five cuts on each plate. Attach a label or table tent to each, and display your professional knife cuts.
  6. As a group, receive observational feedback from your instructor about honing, sharpening, knife grip, and safety techniques.
  7. Compare and contrast the professional knife cuts of your classmates. Participate in a class discussion of the knife choices and cutting techniques that worked well for you and for others.
  8. List the knife cuts for which you would like to improve your technique.
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9. Turn in your completed lab sheet to your instructor.