

Hand Tools and Utensils



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Hand Tools and Utensils

Knowing your way around a commercial kitchen is key to a successful culinary career. Learning how to use the common tools and utensils will help you get started on your path to work in the food industry. This unit will cover these common tools and utensils including information on the essential knife skills you will need.

Unit Topics

- Parts of a knife
- Types of blade edges
- Types of knives
- Knife sharpening tools
- Statements concerning knife safety practices
- Statements concerning rules to follow when sharpening knives.
- Classic cuts
- Food preparation smallware
- Cookware descriptions.
- Cooking tools and utensils and their correct uses
- Baking pans and dishes and their correct uses
- Baking tools and utensils
- Statements concerning food handling tools and utensils
- Statements concerning rules to observe when using and caring for utensils

Assignments

- Use a steel.
- Sharpen a French knife.
- Use a knife properly.
- Demonstrate classic cuts.



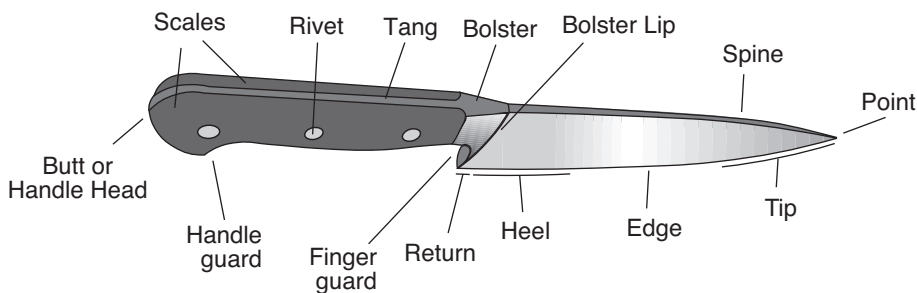
Hand Tools and Utensils

Parts of a knife

Key terms:

- **Anchor**—Device that keeps something in place
- **Bolster**—To raise or support the weight of a tool
- **Encapsulated**—To be completely covered
- **Forged**—Steel is melted and poured into a blade mold, repeatedly hammered and cooled, sharpened, attached to a handle, and then finished to remove rough edges
- **Ground**—To smooth and grind metal by rubbing it against an abrasive, rough surface
- **Piercing**—Penetrating an item by poking it with a sharp object
- **Stamped**—Blade that is cut from a large sheet of steel, ground down to the correct shape, sharpened, and attached to a handle

- Knife—Tool consisting of a handle and a blade made of **forged** or **stamped** steel that is used to cut or slice food into smaller, more manageable pieces
- Parts of a knife—Blade and handle





- Parts of a blade
 - ◆ Point—Sharp place where the edge and the spine meet, used for **piercing**
 - ◆ Spine/back—Flat top of the knife blade that provides blade stability while cutting
 - ◆ Bolster lip—Place where the bolster angles down into the blade; those that blend in with the blade are safer, as they don't trap food particles in the knife
 - ◆ Tip—Point of the knife, used for fine slicing and delicate cuts; serves as an **anchor** during mincing
 - ◆ Edge—Cutting edge of the blade that extends from the tip, or point, to the heel
 - ◆ Heel—Cutting edge furthest from the point; used to apply force to the edge when making a squash through thick food or a hard cut, such as through small bones
 - ◆ Return—Place where the heel stops; a gentle curve on a return allows for a smooth, nonstop rocking motion during cutting
- Parts of a handle
 - ◆ Bolster—Collar that joins the blade with the handle; used to provide the hand stability, balance, and strength while cutting
 - ◆ Tang—Part of the blade that extends into the handle
 - Full tang—Tang extends all the way down the handle

- Encapsulated tang—Handle is molded into a tang
- Rat tail tang—Tang is enclosed within the handle and secured with a bolt or pommel at the handle head
- Half tang—Tang extends halfway down the handle
- ◆ Rivet—Metal pins used to join the handle scales to the tang to form the handle; should be flush with the handle (no bumps on the handle)
- ◆ Scales—On knives with riveted handles, the material (usually wood) attached to the tang to form a handle
- ◆ Butt/handle head—Place where the handle ends
- ◆ Handle guard—Curve on the blade side of the handle towards the butt; allows for better grip and ease of rocking cutting motion
- ◆ Finger guard—Part of the bolster that is designed to strengthen the heel of the knife, to provide additional weight forward of the handle, and to protect the finger from accidentally slipping across the blade

Types of blade edges

Key terms:

- **Arcs**—A series of curved, crescent shapes
 - **Beveled**—Two slanting edges that meet at a point
 - **Chisel**—Metal cutting tool with a square side and an opposite beveled side; top is flat and bottom connects into a handle
 - **Convex**—A surface that curves outward (rather than inward)
-
- V-edge—A regular V-shaped blade
- 
- ◆ Is sharp on each side of the cutting edge
 - ◆ Found on most kitchen knives
-
- Double-beveled edge—A V-shaped blade with an extra set of edges behind the blade
- 
- ◆ Is sharp on each side of the cutting edge
 - ◆ Cuts more precisely, because the back bevel makes the cutting blade thinner

Hand Tools and Utensils

- **Convex** edge—A blade with a rounded curve down to the edge

Note: Also called hamaguri-ba



- ♦ Is sharp on each side of the cutting edge
 - ♦ Has more metal behind the sharpest part of the edge, making the cutting blade thinner
 - ♦ Provides a more precise cut because of the thinner blade
- **Chisel** edge—A blade that is sharp on one edge and flat on the other



- ♦ Available in right- and left-hand versions
 - ♦ Used primarily for cutting, chopping, and slicing Japanese sushi
- **Serrated** edge—A blade with sharp, pointy “teeth” along the cutting edge



- ♦ Can be sharp on one side, flat on the other, or sharp on both sides
 - ♦ Used to slice and tear without adding undue pressure to the food
 - ♦ Used with a sawing action to cut bread without flattening it
- **Scalloped** edge—A blade with wavy edges shaped in a series of small, sharp **arcs** or bumps



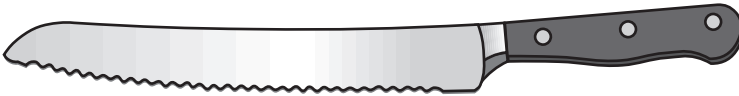
- ♦ Used to slice through meat and bread

Types of knives and their uses

Key terms:

- **Bulk**—A large lump or mass
- **Butcher**—Person who prepares and sells bulk, raw meat
- **Fillet**—To cut and prepare boneless portions of meat; to remove the meat from the bone
- **Paring**—Cutting a small piece from a larger piece
- **Utility**—A tool used for practical, everyday purposes

- Serrated bread knife—A knife with a serrated cutting edge that uses a saw-like motion to prevent crushing the food item being cut



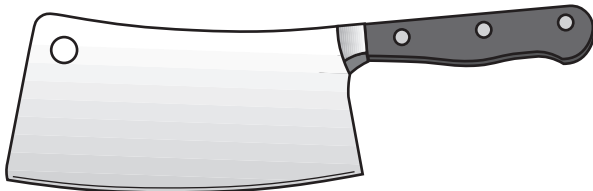
- ♦ Used to slice bread or cake
- Butcher knife—A larger, thicker version of the chef's knife

Note: Also called a scimitar. In French, a butcher knife is called a boucheron knife (pronounced “boo-shron”).



Used to cut and trim all types of **bulk** raw meat

- Cleaver—A large, heavy-duty, rectangular knife with a V-shaped edge



- ♦ Used to perform heavy-duty kitchen cutting functions
Examples: Splits, chops, pounds, dices, and slices
- Fillet knife—Knife with a flexible blade

Note: Also called a boning knife



- ♦ Used to skin, bone, and fillet fish and debone other meats

Hand Tools and Utensils

- Chef's knife—The most common all-purpose knife that is approximately 8 inches long and has a V-shaped edge

Note: Also called a French knife



- ♦ Used to slice, cut, and shred raw fruits and vegetables
- ♦ Used to chop small quantities of food such as parsley, onions, or nuts
- ♦ Used to dice and mince ingredients

- **Paring** knife—A small knife with a slightly serrated edge



- ♦ Used to peel fruits and vegetables
- ♦ Used to cut or slice fruits and vegetables

- **Utility** knife—A smaller, lighter version of the chef's knife

Note: Also called a salad knife



- ♦ Used for light cutting, slicing, and peeling
- ♦ Used to pare and section fruits
- ♦ Used to core lettuce

- Slicer—Knife with a serrated or double-beveled edge

Note: The specific name of a slicer indicates its use, such as a *ham slicer*.



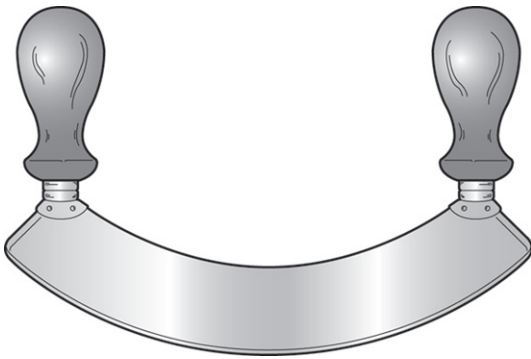
- ♦ Used to slice all kinds of meat
- ♦ Used by carvers to carve meats at buffet-style restaurants
- ♦ Used to slice tomatoes and lettuce wedges

- Spreader—A broad, round, paddle-like knife



- ♦ Used to spread soft fillings

- Mezzaluna—A curved steel blade, often with a vertical handle at each end



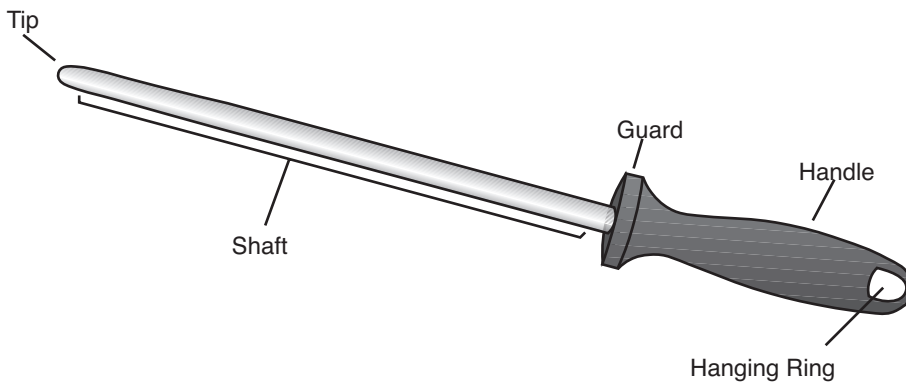
- ◆ Used to chop food on a cutting board or in a wooden bowl
- ◆ Emulates the rocking motion of a chef's knife

Knife sharpening tools

Key term:

- **Tapered**—Gradually narrowing at one end, ultimately forming a point

- Steel—A long tool with a sharpening rod on one end, and a grip handle on the other end

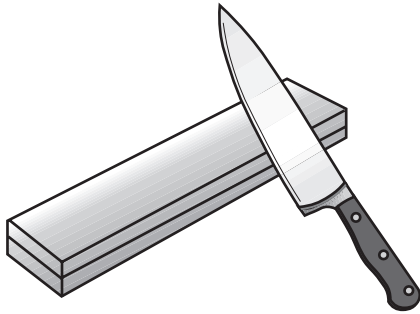


- ◆ Used to hone a knife's cutting edge
- ◆ Made of very hard, high carbon steel, or ceramic
- ◆ Parts of a knife sharpening steel
 - Tip—**Tapered** end of the shaft that rests on a table or cutting board
 - Shaft—Long, pencil-thin portion of the steel which a knife is stroked against
 - Guard (Hilt)—Prevents the thumb and fingers from slipping onto the shaft and getting cut
 - Handle—Used to hold the steel safely
 - Ring—Used to hang the steel for storage

Hand Tools and Utensils

- Sharpening stone—A rectangular stone used to sharpen knives

Note: Also called a whetstone



- ♦ Used to smooth the blade after sharpening with a steel
 - Removes the burr
 - Smooths scratches created with the sharpening steel
- ♦ Lubricated with water or oil so the knife slides across it smoothly
- ♦ Can be coarse, medium or fine
- ♦ Made of sandstone or slate most commonly
- ♦ Can be coated in diamond chips, which helps sharpen knives even more

Knife safety practices

- Always pick a knife up by its handle, never the blade.

Caution: Use extreme care when handling knives.

- Wash knives by themselves, not with other utensils.

Caution: Never place knives in water and leave unattended.

- Placing knives in a sink full of soapy water creates a hazard, as they cannot be seen and could potentially cut the dishwasher's hand or fingers.
- Knives should be placed in a sink one at a time.
- Wash each knife individually.
- Dry each knife separately.
- Store in a knife rack or special holder in a drawer in the department in which it is used; many restaurants will use magnetic strips to hold knives on the wall, away from work areas for safety but still readily available.

Note: Do not store knives loose in a drawer, as this may dull the cutting edge and can create a safety hazard.

- Use a knife only for jobs for which it is intended.

Example: Knives are not designed to pry lids open.

- Use a cutting board; never cut on a metal surface or soft countertop.

- Never toss or throw knives, such as into a sink, onto a counter, or toward another person.
- Never place knives in water and leave unattended.
- Keep knives sharp; a sharp knife is safer than a dull knife.

Note: To test the sharpness of a knife, slice a tomato and if it cuts with ease, the knife is sharp enough.

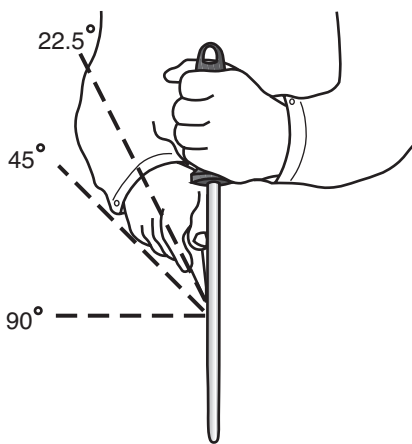
- Keep knife handle free from grease or other slippery materials.
- If you drop a knife, do not attempt to catch it.
- Cut away from your body and hands.
- Place items to be cut on a cutting board; do not hold in your hand.
- Place knife on a table and allow others to pick it up instead of handing it to

Rules to follow when sharpening knives

Key terms:

- **Blunt**—Rounded on a usually sharp edge; no longer sharp
- **Industrial**—For use in a workplace, where it will be used frequently

Note: The method for sharpening a French knife is given; angle to stone will vary for other knives.



- Use a medium stone to sharpen most knives; if a knife is particularly dull, use a coarse stone first, then finish with a finer stone.
- Knives that have become blunt will need to be sharpened on an industrial diamond-coated steel.
- If using a whetstone, lubricate the stone with mineral oil or water.
- If using a sharpening steel, grasp the handle of the steel firmly.
- Hold the knife in one hand and the stone or steel in the other hand.
- Hold the knife at a constant 20° angle to the sharpening stone or steel.
- Position the stone or steel to keep it from slipping.

Hand Tools and Utensils

- Always sharpen in the same direction to create saw-like ridges in the knife's edge.
- Never stroke each side of the blade more than once in succession; stroke one side of the blade then the other side, alternating each time.
- Make the strokes on each side in equal numbers and of equal pressure.
- As a general rule, make six to eight strokes against the sharpening stone or steel on each side of the blade.

Classic cuts

- Slicing—To slice food, guide the knife straight through the food with a sharp knife and cut food crosswise, vertical(perpendicular) to the cutting board.

Note: Never force the knife, let it do the work. Always use the correct blade length and width for a wide variety of cuts.

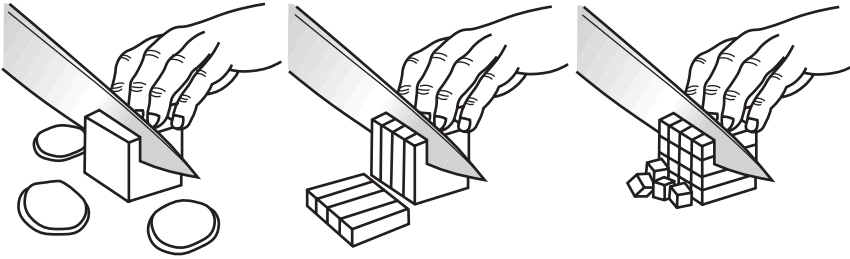


◆ Types of slices

- Chiffonade cut—Leaves (such as lettuce or herbs) are stacked on top of each other, rolled tightly, and then sliced into thin strips.
 - Rondelle cut—Food item (such as a shallot) is cut into small, thin circles by holding the knife perpendicular to the food and then making slices.
 - Diagonal cut—Similar to a rondelle cut, but the knife is held at a slight angle (instead of perpendicular) to the food, creating a diagonal slice.
 - Cubing—Food is cut into 1/2-inch strips, strips are lined up, and then cut into equal-sized cubes or square blocks.
- Chopping—Cutting food into pieces that are roughly the same size by keeping the tip of the knife in contact with the cutting board while lowering the knife with a firm and rapid motion back and forth over the food.



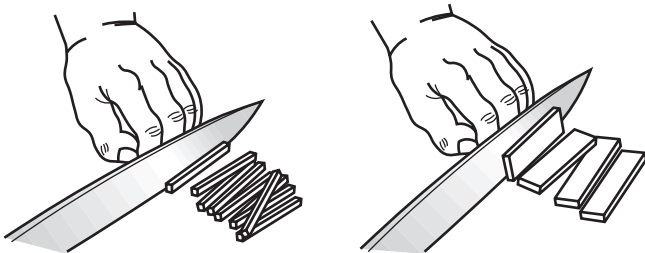
- Dicing—Cutting food into cube- or matchstick-shaped pieces.



- ♦ Types of dices

- Julienne (pronounced “joo-lee-ehn”)—Food is cut into long, thin, matchstick-shaped rectangular pieces, measuring $\frac{1}{16}$ of an inch on the sides and $1\frac{1}{2}$ to 2 inches long.

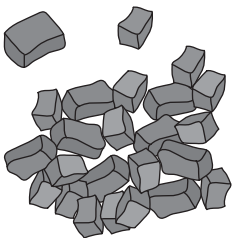
Example: Julienned ham on a salad bar



- Brunoise (pronounced “broon-wah-z”)—Food is julienne cut and then diced into very tiny cubes as if it were “chunked” in a blender.

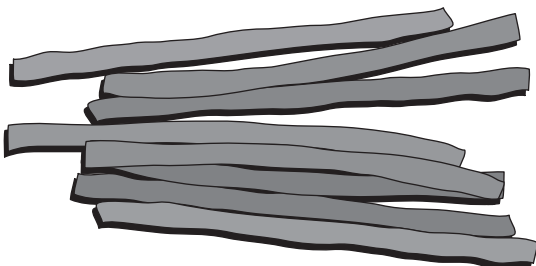
Example: Vegetables brunoised as a basis for soup

Note: Brunoise translates into “to brown” in French.



- Bâtonnet (pronounced “bat-awn-ay”)—Food is cut into matchstick shapes, slightly thicker than a julienne cut, measuring $\frac{1}{4}$ of an inch by $\frac{1}{4}$ and $1\frac{1}{2}$ to 2 inches long.

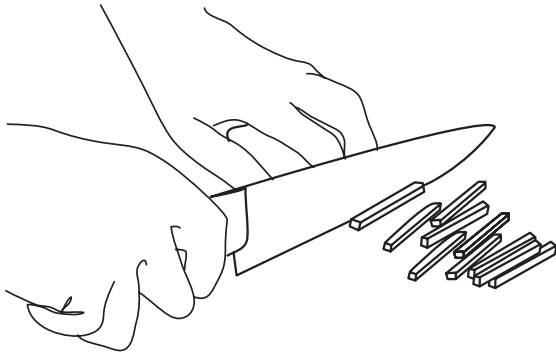
Note: Bâtonnet translates from the French language to mean “small stick.”



Hand Tools and Utensils

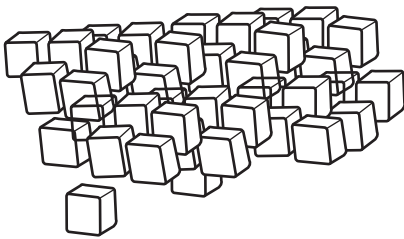
- Allumette (pronounced “ehl-you-may”)—Food is cut the size and shape of a matchstick, measuring $\frac{1}{8}$ of an inch on the sides and 1 $\frac{1}{2}$ to 2 inches long.

Example: Potatoes are commonly cut using this method.



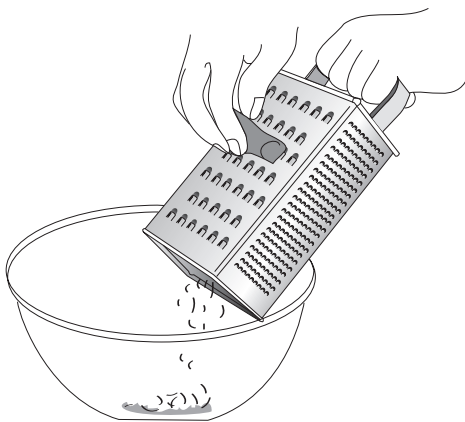
- Mincing—Most commonly used to cut herbs, garlic, shallots, and onions for sauces very finely and evenly with a knife.

Note: The term “mincing” is often mistakenly used in place of the term chopping.

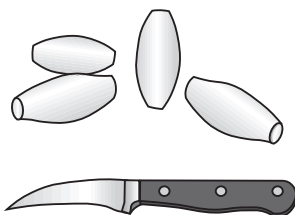


- Shredding and grating—Rubbing or dragging food across a sharply grated metal or plastic utensil, such as a box grater, mandolin, or food processor, to shred it into small slivers.

Examples: Nutmeg, cheese, potatoes, and ginger



- Tournée (pronounced “tore-nay”)—Cutting potatoes, squash, or carrots into 2-inch long football (oblong) shaped pieces, giving the food a consistent appearance on the plate.



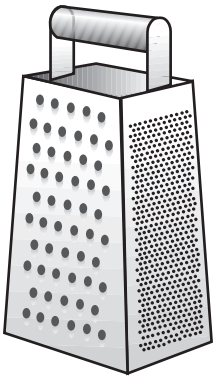
Food preparation smallware

Note: These tools and utensils are used to prepare food for cooking and baking.

Key terms:

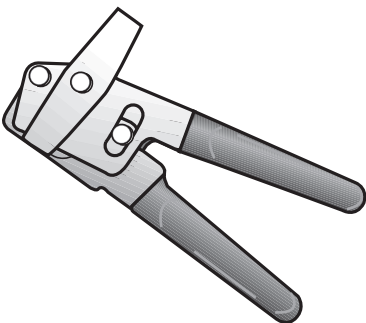
- **Batter**—Mixture of flour, eggs, and milk that is used to coat food before being fried in fat
- **Compresses**—Pushes down or squeezes together
- **Fibers**—Long, thin threads of tough muscle tissue
- **Mass**—A lump of substance with no particular shape
- **Spout**—Indented place where liquids can flow at a regulated pace
- **Strain gauge**—Tool that measures weight by the amount of stress an object places on a coil or spring
- **Swivel**—A device that allows a part to turn or move in a certain direction
- **Zest**—Small scrapings of citrus fruit peel

- Box grater—A box-shaped tool with holes of varying degrees of fineness on each side of the box



- ♦ Used to grate cheese, potatoes, and carrots to various degrees of fineness
- ♦ Has four sides with various size holes and a handle so the person grating won't skin his or her fingers
- ♦ Contains holes that are sharp so when a food item is dragged across the tool, the food shreds

- Can opener—A tool for removing the lids from metal cans



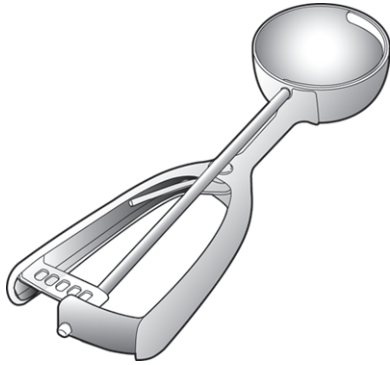
- ♦ Used to open metal cans by grabbing onto the edge of a can while razor-sharp circular blades cut the metal along the circular top to reveal the contents
- ♦ Available in manual and electric varieties

Hand Tools and Utensils

- Corer—A tool used to remove cores from fruits such as apples or pears



- Disher—A tool used to portion and serve foods



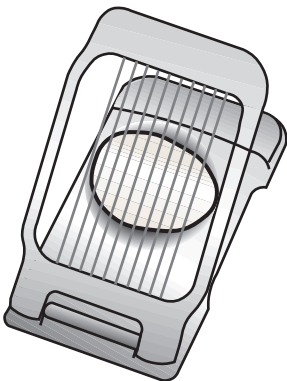
Note: For portion control, the number on the disher indicates servings per quart.

Example:

Disher Measurements	
Number *	Measure
8	1/2 cup
10	6 tablespoons
12	1/3 cup
16	1/2 cup
20	3 1/5 tablespoons
24	3 2/3 tablespoons
30	2 1/5 tablespoons
40	1 3/5 tablespoons

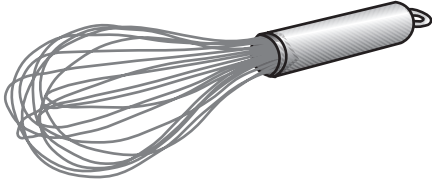
* Portions per quart

- Egg slicer—A small hinged frame with tight wires attached

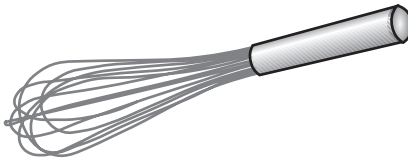


- ◆ Used to slice difficult food items, such as eggs
- ◆ Used as a garnishing tool to fan strawberries

- French wire whip and heavy/rigid whip—A utensil made of rigid wires

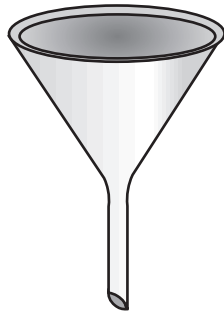


French wire whip

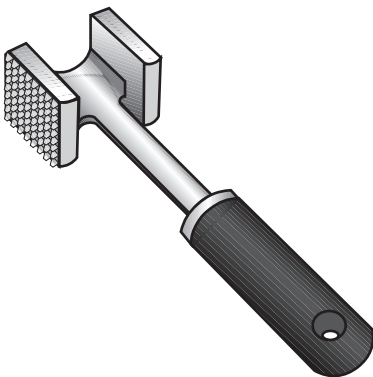


Heavy/rigid whip

- ♦ Used to beat thick, dense **batter** because of its thicker wires
 - Examples: Whips pudding, cake batter, or pancake/waffle batter ingredients together
- Funnel—A pipe with a wide mouth and narrow stem



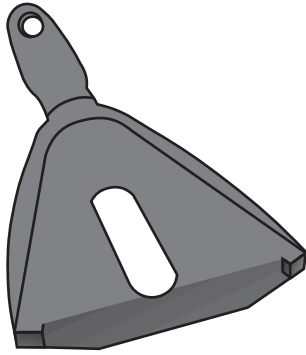
- ♦ Used to pour liquids and fine-grained ingredients from one container to another
- ♦ Used to place liquid or fine-grained ingredients into a bottle with a small opening
- ♦ Used to prevent spilling and wasting of ingredients
- ♦ Made of stainless steel, glass, plastic, or paper
- Hand meat tenderizer—A hammer-shaped tool



- ♦ Used to break up the **fibers** of raw meat to tenderize
- ♦ Used to reduce the toughness of meat
 - Example: A tenderized steak has had the fibers broken up, so it is easier to bite into the meat after it's cooked.

Hand Tools and Utensils

- Jar opener—A tool that provides extra grip and leverage for opening lids



- ♦ Used to remove the lid from a tightly-sealed jar
- ♦ Available in manual and electric varieties
- Kitchen shears—A tool used for a variety of cutting tasks, including portioning dough and trimming pastry



- Measuring cup—A cup that has been calibrated to hold a precise volume

Note: For more information about measuring cups, refer to the publication titled *Kitchen Orientation*.

- ♦ Used to measure dry ingredients
- ♦ Available commonly in $\frac{1}{8}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{2}$, and 1 cup sizes
- ♦ Made of metal or plastic
- Measuring glass—A glass measuring cup with a **spout** and handle marked with units of measurement

Note: For more information about measuring glasses, refer to the publication titled *Kitchen Orientation*.

- ♦ Used to measure liquid ingredients
- ♦ Can vary in number increments between different measuring cups, as liquid and dry ingredient measures differ
- ♦ Available commonly in 1 cup to 4 cups sizes
- ♦ Made of glass or plastic

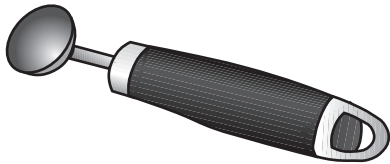
Note: Glass is preferred, as it can withstand heat from scalding ingredients and can be used in the microwave.

- Measuring spoon—A spoon-shaped utensil that has been calibrated to hold a precise volume

Note: For more information about measuring cups, refer to the publication titled *Kitchen Orientation*.

- ♦ Used to measure dry and tiny amounts of liquid ingredients
 - ♦ Available most commonly in $\frac{1}{4}$, $\frac{1}{2}$, and 1 teaspoons, and 1 tablespoon
 - ♦ Made of metal or plastic
- Melon baller—A spoon-shaped utensil with a round scoop at the end

Note: Also called a Parisienne scoop

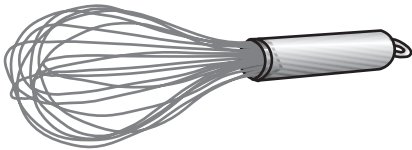


- ♦ Used to create garnishes
- ♦ Used to cut fruit into equal-sized balls the same size as the scoop

Note: Fruit that is cut with a melon baller is often put into salads, used on fruit trays, and plated.

- ♦ Available in various scoop sizes
- Piano wire whip—A whip made of thin, flexible wires

Note: Also referred to as a balloon whip



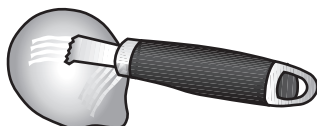
- ♦ Used to whip eggs or thin mixtures
 - ♦ Weighs less than a French whip
- Scale
 - ♦ Used to measure dry ingredients by weight, not volume
 - ♦ Balance—Compares known **mass** with item to be weighed; comes with weights
 - ♦ Mechanical/spring—Platform on a heavy spring **compresses** downward to identify the weight
 - ♦ Digital—Resistance of a **strain gauge** changes according to the amount of compression applied by the item to be weighed

Hand Tools and Utensils

- Spice/herb/coffee mill
 - ♦ Used to grind spices, herbs, or coffee beans to a fine texture
 - ♦ Works by placing coffee beans, herbs, or whole or pieces of spices into a compartment, twisting or cranking the mill to crush the item and break it into fine pieces as it runs through a series of gears
- Vegetable peeler—A tool with a handle to prevent the cutting of fingers and a **swivel** blade for ease of use



- ♦ Used to peel thin skin from vegetables
 - ♦ Used to curl chocolate
 - ♦ Used to slice off small sections of cheese
 - ♦ Designed so the handle is at a right angle to the blade or in a straight line with the blade
- Zester—A tool with small, sharp-edged holes at the end that cut the skin of fruit into fine shreds



- ♦ Used to scrape the **zest** from citrus fruits, such as oranges, lemons, or grapefruit peels

Note: Zest is used to flavor recipes.

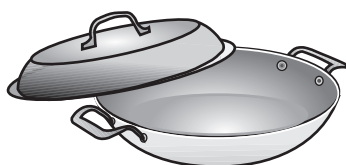
Cookware

Note: The cookware covered in this objective are used to cook prepared food ingredients on the range and/or in the oven.

Key terms:

- **Chafer**—Also called a chafing dish; a large, shallow pan with a heat source beneath it used to keep food warm or hot
- **Condensation**—Water droplets that form near a cool surface when water vapor loses its heat and begins to turn into a liquid
- **Evaporation**—When hot water turns into a vapor and disappears into the air, leaving behind dry, solid particles that were in the water
- **Fondue**—Bits of food placed on a spear and dipped into hot, melted sauce
- **Nonstick**—Surface coated so that food won't stick to it easily
- **Omelet**—Beaten eggs cooked in a pan and folded around one or several fillings
- **Sauteuse**—To sauté food in a pan, then add other ingredients and liquids to stew the mix
- **Stock**—Liquid made by simmering then straining out meat, fish, bones, vegetables, and herbs, leaving behind broth used for soups

- Braiser pan—A round pan with lid and grip handles that holds about 6 quarts

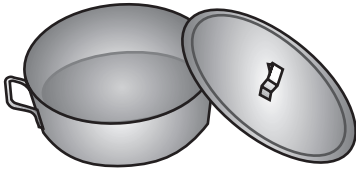


- ◆ Used to cook meat or vegetables by browning the food in a small amount of fat, adding liquid, and cooking covered at low heat
- ◆ Used on the stovetop and in the oven to braise food

Example: Chicken is browned in oil in the pan, then the meat and its accompanying juices simmer in wine or chicken stock.

- ◆ Prevents liquid evaporation for successful braising through the use of a tight-fitting lid

- Brazier pan—A round pan with a tight-fitting lid and a heavy bottom



- ◆ Used to cook foods requiring heavy-duty stewing
- ◆ Used to brown or sear meat in the pan before other ingredients are added
- ◆ Used for items that have a combination of meat, chunky ingredients, and liquids

Examples: Seafood jambalaya, gumbo, and spaghetti sauce

- Chef's pan—A medium-depth pan with a grip handle and a long handle on opposing sides that holds 2 to 6 quarts of food



- ◆ Used to allow rapid **evaporation** of liquids because of its wide pan mouth, outward sloping edges, and flat bottom
- ◆ Used to allow condensation which prevents liquid evaporation because of the accompanying pan's lid
- ◆ Used to cook a stovetop item that requires rapid change of temperature because of the pan's thick metal base
- ◆ Used interchangeably with a sauce pan, but the shape of the chef's pan allows more flipping and wider manipulation of food during cooking
- ◆ Used to cook stir fry, stew, paella, risotto, and sauces

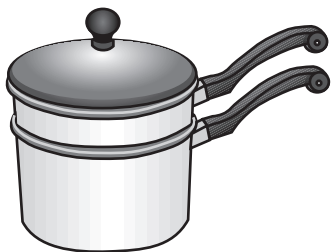
- Chestnut pan—A pan that is similar in shape to a frying pan, but has large, circular holes in the bottom and a long handle that prevents hand and finger burns



- ◆ Used to cook chestnuts by allowing chestnut shells direct contact with the heat source, whether it be a fire or stovetop through the use of holes

Hand Tools and Utensils

- Double boiler—Two nesting long-handled saucepans



- ♦ Used to cook foods that scorch easily
- ♦ Contains a bottom saucepan, which is closest to the heat source, and holds boiling water
- ♦ Contains a top saucepan that cooks according to the heat of the boiling water beneath it
- ♦ Uses boiling water to cook sauces that can separate or scald if cooked on a direct heat source

Examples: Cooking custards, pudding, and delicate sauces (such as beurre blanc and melting chocolate)

- Dutch oven—A large, oblong pot with a tight-sealing lid that holds 6 to 8 quarts of food



- ♦ Has firm-grip handles on each side to safely grip the heavy pot, made heavier with the addition of food
- ♦ Used to make large quantities of soups or stews
- ♦ Used to cook pasta and whole birds (turkey or chicken)
- ♦ Used to roast or braise meat

- **Fondue** pot—A heated pot used to melt cheese or chocolate



- ♦ Used to keep the melt warm so diners can dip bread, vegetables, or fruit into the sauce

- ◆ Consists of a stand, heat source, and pot
 - Stand is tall enough so a heat source can rest beneath the pot.
 - Heat source, either a electric heating element or a portable cooking fuel, rests directly beneath the pot.
 - The pot holds the item to be melted into a warm sauce.
- Frying pan (skillet)—A pan with a lid, long handle, and sloping sides



- ◆ Used to cook delicate food items that have a short cooking time
 - Examples: Cooking omelets, fish, and pancakes or frying bacon and sausage
- ◆ Has sloping sides to help flip and move food around on the surfaces with a spatula
- ◆ Has a long handle that protects the cook's hands and fingers from spatter and heat source burns
- ◆ Includes an accompanying lid that holds in **condensation** and prevents spatter burns
- ◆ Measures 6.5 to 14 inches across and can be 1 1/2 to 3 inches deep
- ◆ Made of **nonstick** material, so must be used with nonmetal utensils
- Grill pan—A heavy, flat pan with a long handle



- ◆ Used to grill food items
 - Examples: Grilling hot panini sandwiches, hamburger patties, and chicken breasts
- ◆ Contains ridges on the bottom of the pan that prevent steam burns to the food and catch some of the fat off foods
- ◆ Available in flat-iron and skillet grill pan varieties
- ◆ Comes in round, square, and rectangular shapes
- Hotel pan—A rectangular stainless steel pan



Hand Tools and Utensils

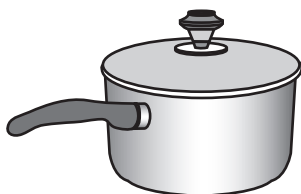
- ◆ Used to cook, store and serve food
- ◆ Designed to fit in steam tables, racks, banquet table burners, and **chafers**
- ◆ Comes in 12 X 20 inches for a full-size pan and $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{6}$ and $\frac{1}{9}$ sizes
- ◆ Available in standard depth of 2 inches, with 4 inch and 6 inch deep sizes
- ◆ May come with perforated sides and bottoms for steaming foods
- **Omelet pan**—A smaller, lightweight skillet



- ◆ Used to cook omelets
- ◆ Contains curved edges to allow easy flipping
- ◆ Is deep enough to hold an omelet and its fillings
- **Paella pan**—A pan the same shape and size of a medium or large skillet, but with grip-type handles instead of the long handle found on a skillet

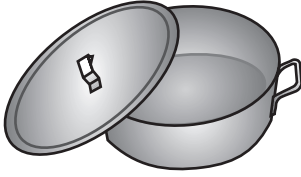


- ◆ Used to cook the Spanish dish called *paella* that consists of saffron rice, seafood, shellfish, and chicken stewed together
- ◆ Comes with a lid that holds in condensation to steam cook the seafood, poultry, vegetables, and rice
- **Saucepan**—A deep, round, lidded pan with a long handle to prevent splatter burns



- ◆ Used to cook small amounts of food, such as sauces, vegetables, rice, boiled eggs, noodles, and soup on top of the range
- ◆ Comes in 3 to 4 quart and $1\frac{1}{2}$ to 2 quart sizes
- ◆ Has a tight-sealing lid to lock in steam and condensation
- ◆ Often comes in a nonstick form

- Saucepot—A deep, round pan with straight sides and grip handles on either side of the pot



- ♦ Used to cook pasta, sauces, etc. on the stovetop
 - ♦ Similar to a stockpot but not as large or deep
 - ♦ Comes with a tight-fitting lid
- Sauté pan—A pan with straight edges that are taller than a frying pan's and holds more volume than a frying pan

Note: Egg skillets are variations of sauté pans.



- ♦ Used to cook, brown, fry, or sauté foods quickly in a small amount of fat over medium to high heat
- Examples: Saute onions in butter or fry bacon bits for salad
- ♦ Measures anywhere from 2.5 to 3.5 inches tall and 6 to 16 inches across
 - ♦ Comes with a lid to cover food as it is cooking
 - ♦ Made of very heavyweight metal
 - ♦ Can have both a grip handle and long handle on opposite sides from each other, used to lift and carry heavy quantities of food
- **Sauteuse** pan—A round pot that holds 2.5 to 7 quarts of food



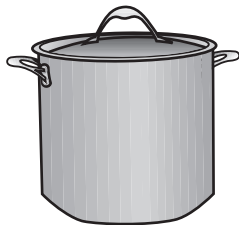
- ♦ Used to cook pasta, stew, and meat dishes
 - ♦ Comes with a lid to hold in steam
 - ♦ Contains grip handles on alternating sides of the pot to help the cook carry it
 - ♦ Has medium-length outward sloping edges
- Stir-fry pan—A bowl-shaped pan with a handle and a flat bottom

Hand Tools and Utensils



- ◆ Used to cook oriental stir-fry dishes
 - ◆ Used to sear meat and to fry foods in a small amount of oil
- Examples: Stir fry chicken, carrots, broccoli, and green peppers

- ◆ Has a long handle to slide food back and forth, preventing it from sticking to the bottom and burning
- ◆ Has rounded, sloping edges to help the cook turn ingredients
- **Stock pot**—A tall, deep pot that holds a large amount of liquids



- ◆ Used to boil pasta, simmer stews and soups, cook chili and chicken for stock, and boil seafood (crabs, mussels, lobsters, or clams)
- ◆ Comes in sizes that hold anywhere from 6 to 20 quarts, but 10 to 16 quart sizes are the most common
- ◆ Contains a heavy bottom that protects the food from sticking or burning
- ◆ Comes with a snug-fitting lid
- ◆ Some have a pasta insert, which is a strainer with holes; pasta is placed in the strainer, which is placed into boiling water in the stock pot, and can easily be lifted out to drain the water out of the pasta

- Wok—A round, bowl-shaped pan



- ♦ Used to fry foods quickly at a high heat
Example: Fry beef cubes and broccoli for stir fry
- ♦ Has either a rounded or flat bottom
- ♦ Contains a lid that prevents spattering
- ♦ Is about 4 inches deep and 12 to 6 inches in diameter

Cooking tools and utensils

Key terms:

Blanch—To place food briefly in boiling water to loosen the skin, soften it, or whiten it

Butane—Colorless gas that is highly flammable

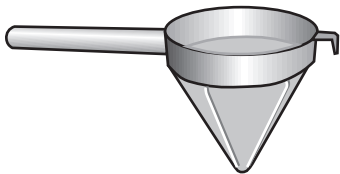
Mesh—Material that has been woven together like a net

- Chef's torch—A small gun-shaped torch



- ♦ Used to melt food
Examples: Crème brûlée, baked Alaska, meringue pies, melting cheese, browning items
- ♦ Fueled by a small **butane** gas insert, which must be replaced when it runs out
- ♦ Requires extra caution in the kitchen, as it involves cooking with a hand-held open flame
- China cap strainer—A **mesh** funnel with a handle

Note: A wooden pestle is often used to push thicker foods through the mesh.



- ♦ Used to strain soups or sauces
- ♦ Used to press herbs

Hand Tools and Utensils

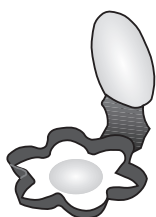
- ◆ Used to extract oils and essences
- ◆ Used to **blanch** vegetables
- ◆ Used to reheat pasta
- ◆ Made of either fine or medium grade metal mesh attached to a hoop
- Colander—A large sieve with holes distributed around the bowl

Note: A colander should not be confused with a strainer. A colander has large, circular holes, is usually larger than a strainer, has two “grip” handles on each side of the bowl, and sits flat, so both hands are free.



- ◆ Used to drain liquids from food
- Examples: Used to rinse the fat from hamburger meat or wash salad greens, drain boiling water from spaghetti noodles and potatoes
- ◆ Contains grip handles on each side of the bowl for ease of holding and to prevent finger burns
- Cooking mold—A tool available in various shapes and sizes

Note: Cooking molds differ from cookie cutters; although they can look the same, a mold is actually placed in a hot pan during cooking, versus cutting the food before or after it’s cooked into a shape.



- ◆ Used to cook foods in special shapes
- Examples: Perfectly round pancakes or heart-shaped eggs
- ◆ Is usually made of metal so it can be placed in a skillet
- Egg poacher—A pot insert with indentations to hold eggs

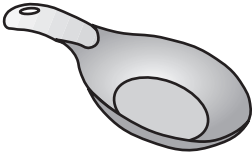


- ◆ Used to poach eggs by boiling water in a pot on the stove, placing the insert on top of the boiling water, and cracking an egg into the poacher.
- ◆ Available in single and multiple (usually 4–6 eggs) poaching varieties

- Splatter screen—A round wire mesh placed on top of a pan



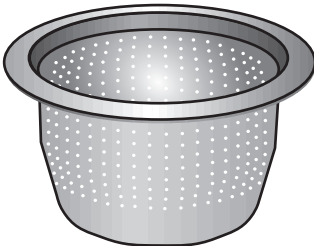
- ♦ Used to prevent burns and splattering while sautéing or frying foods
 - ♦ Has a handle so it can be lifted off the pan easily to flip foods
- Spoon rest—A sanitized place to rest a spoon or ladle while cooking



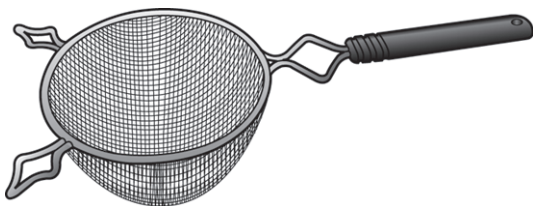
- ♦ Used to keep range and countertops clean
 - ♦ Can be placed in a dishwasher for easy clean-up
 - ♦ Made of metal or ceramic
- Strainers

- ♦ Strainer pan insert—Used to strain food from liquids

Examples: Strains chicken stock from chicken, pasta from boiling water, and seeds from fruit sauces

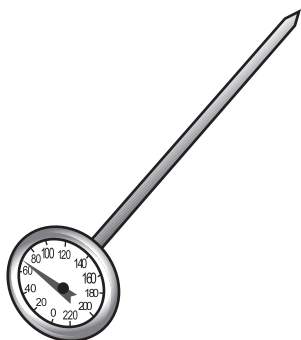


- ♦ A perforated pot-liner
 - ♦ Available in many sizes, although a common size is the stock pot pasta insert
- Strainer—Used to strain foods from liquids



- Thermometer—Measures the internal temperature of foods during cooking

Hand Tools and Utensils



- ◆ Used to make sure food has reached proper temperature
- ◆ Used in both cooking and baking
- ◆ Used commonly on food items like meatloaf, whole turkeys and chickens, beef (steak, roast, hamburger patties), pork chops, casseroles, egg dishes (quiche), soups, gravies, chocolate tempering, yeasts/dough
- ◆ Used to prevent foodborne illness, such as E.Coli and Salmonella
- ◆ Used to prevent overcooking or undercooking foods
- ◆ Available in dial and digital varieties
- ◆ Measures Celsius and/or Fahrenheit scales
- Trivet—A small heat-resistant stand placed on a table to prevent pan or dish burns



- ◆ Used to hold food about an inch above the table's surface to allow air to flow beneath the hot pan or dish
- ◆ Can be custom-shaped for teapots and gravy boats and is often decorative
- ◆ Used in both cooking and baking

Baking pans and dishes

Note: These baking pans and dishes are used to prepare food in an oven.

Key terms:

- **Broiler**—Dry heat stove compartment used to cook food at very high temperatures
- **Circulate**—To flow freely around an object or within an area
- **Drippings**—Juices that drip from cooking meat
- **Insulated**—An object (such as a pan) treated or designed so that it prevents transfer of heat
- **Perforated**—An object that has been punched with a series of holes
- **Silicone rubber**—A flexible, stretchy rubber treated with the chemical, silicone, that remains flexible in very hot and cold temperature ranges and is resistant to chemical breakdown
- **Tart**—Fruit or custard filled pie that does not have a top crust

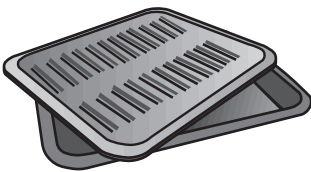
- Bain-marie pan

Note: Similar to a double boiler



- ♦ Works by placing a pan of food in another pan full of hot water to create a moist heat cooking environment in the oven
 - ♦ Works also by placing one or several smaller bain-marie pans, having high sides, a lid and a handle, in a long, tall, deep pan full of hot water
 - ♦ Used to bake flourless cakes
 - ♦ Used to keep sauces hot while the entrée is cooking
 - ♦ Used to prepare vegetable garnishes
 - ♦ Bain-marie also refers to stainless steel pans of food placed in a pan of hot water to keep food warm in a steam table.
- **Broiler** pan—A two-piece pan designed for cooking at high heats in an oven

Note: Also called oven roaster, broiler roaster, or oven broiling pan



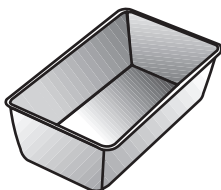
- ♦ Used to broil meat or vegetables in the oven
 - ♦ Consists of two parts
 - Broiler plate lid—A grated metal surface that food rests upon while allowing **drippings** or grease to collect in the pan beneath
 - Drippings plate—Rests below the broiler plate lid to catch the drippings
- Glass baking dish—A square or rectangular glass dish



- ♦ Used to bake and cook foods, such as brownies, lasagna, casseroles, cornbread, and other flat, pourable foods
- ♦ Available in a square dish that is usually 8 x 8 inches or 9 x 9 inches

Hand Tools and Utensils

- ◆ Available in a rectangular dish that is usually 9 x 13 inches
- Loaf pan—A rectangular pan



- ◆ Used to bake bread, cake, and meatloaf
- ◆ Made of aluminum, glass, silicone, or metal
- ◆ Comes in regular loaf size (12 x 6 x 5 inches, holds about 6 cups) and mini-loaf size (5 x 2 1/4 x 2 inches, holds about 1 1/2 cups)
- Meatloaf pan—Two loaf pans with one fitting inside the other

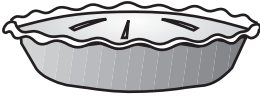


- ◆ Used to drain and catch the drippings from meatloaf as it cooks
- ◆ Consists of two loaf pans that fit inside each other
 - Bottom loaf pan is a normal loaf pan that catches the drippings from the slotted loaf pan above it.
 - Top loaf pan holds the meat loaf as it cooks and has grates or holes in the bottom that allow the drippings to drain into the regular loaf pan beneath.
- Muffin tin—A pan containing cups that are spaced apart to allow muffin tops to form

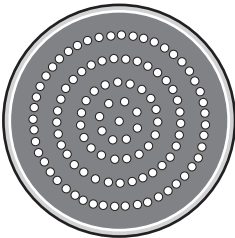


- ◆ Used to bake muffins, cupcakes, and rolls
- ◆ Holds 1/2 to 1 cup of ingredient in each muffin cup on the tin
- ◆ Contains 6–12 cups per tin, typically
- ◆ Made of aluminum, stainless steel, cast iron, or **silicone rubber** (for newer muffin tins)
- ◆ Can make mini muffins in the smaller muffin tins

- Pie dish—A round dish with either a flat or scalloped edge



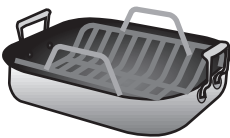
- ♦ Used to bake fruit pies, meat pies, or pie crusts
 - ♦ Holds 4 to 8 cups and are usually 8 to 10 inches across
 - ♦ Comes in regular and “deep dish” varieties
 - ♦ Made of aluminum, glass, ceramic, or stoneware
 - ♦ May contain a scalloped edge which aids in pie crust edge creation
- Pizza pan—A flat, round pan



- ♦ Used to bake pizza
 - ♦ Sized about 14 to 16 inches
 - ♦ Can have a **perforated** bottom to evenly brown the bottom of the crust
- Ramekin—A small ceramic dish



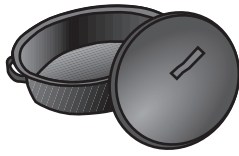
- ♦ Used to cook small portions, flan, or crème brûlée
- Roasting pan—A rectangular pan with shallow edges and ridges on the bottom



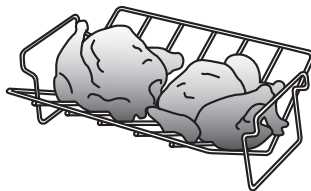
- ♦ Used in an oven to roast whole meats, such as an entire turkey or chicken
- ♦ Contains a roasting rack that is usually placed in the pan so the meat does not stew in its own fat and juices, and to allow dry heat to **circulate** around the meat evenly
- ♦ Has ridges on the bottom that allow fat to collect
- ♦ Has shallow edges which allow the meat to brown evenly on all sides, clear down to the bottom
- ♦ Often has four grip-type handles, one on each side, to lift and/or carry a pan full of heavy meat, roasting rack, and drippings

Hand Tools and Utensils

- Roasting pan with a high cover—A large, tall, oval-shaped pan with a lid

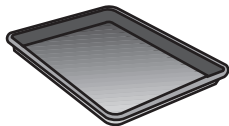


- ♦ Used to roast foods and cook casseroles
 - ♦ Has a tall, dome-shaped lid that accommodates meat on a roasting rack
 - ♦ With the lid on the pan, the moist heat environment cooks meat faster so it doesn't dry out as much
- Roasting rack—A sturdy metal rack placed in a roasting pan

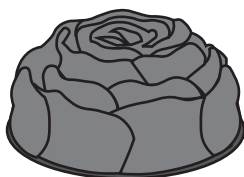


- ♦ Used to hold whole poultry and beef items, allowing the fat to drip into the bottom
 - ♦ Contains about 2" space between the pan's bottom and the bottom of the rack to allow heat conduction and dripping in a typical roasting rack
 - ♦ Comes in V-shaped, adjustable, nonadjustable, flat, vertical, and basket racks
- Sheet pan—A flat, rectangular pan with a lip around the edge to keep the food from sliding off into the oven

Note: Also called a baking pan or cookie sheet.



- ♦ Used for all-purpose baking
- Examples: Sheet cakes, jelly roll cakes, large numbers of cookies, and pastries
- ♦ Available with **insulated** bottoms to keep the food from burning
 - ♦ Comes in full sheet (26 x 18), half sheet (18 x 13), and quarter sheet (13 x 9) sizes
- Specialty mold—A pan with a specialized shape



- ♦ Used to bake food in decorative shapes

Examples: Heart-shaped cake or cookie pan, corn ear shaped cornbread pan, castle-shaped coffee cake pan, Madeleine cookie pans, and heart- or flower- or star-shaped canapé molds

- ◆ Made of metal, ceramic, or silicone
- ◆ Available in nonstick treated metal
- ◆ Includes common specialty mold
- Springform pan—A round pan with high sides

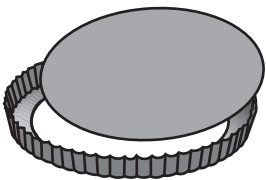


- ◆ Used to bake moist cakes

Examples: Cheesecake and pudding cakes

- ◆ Has a side rim that expands when a clamp is opened, allowing it to separate from the bottom of the pan
- ◆ Makes it easier to bake a moist cake without ruining its presentation when removing it from the pan
- **Tart pan**—A baking pan with short sides that are often scalloped for presentation

Note: A tart pan is a smaller version of a pie pan, but it has shorter, vertical sides. Tart pans smaller than 4 inches across are called “tartlet” pans.



- ◆ Used to make fancy tarts, quiche, and flan
- ◆ Available in round, square, or rectangular shapes
- ◆ Comes in a huge variety of shaped rings, which help the chef make delicate pastries with less sugar (as more sugar will result in browner crust)
- ◆ Ranges from 4 to 12 inches across and $\frac{3}{4}$ to 2 inches deep
- ◆ Made of metal or ceramic
- ◆ Can have fluted edges to create fancy pastries
- ◆ Can have removable bottom to remove the tart without breaking the fancy crust
- **Tube cake pan**—A baking pan with a center tube that conducts the heat through the batter

Hand Tools and Utensils



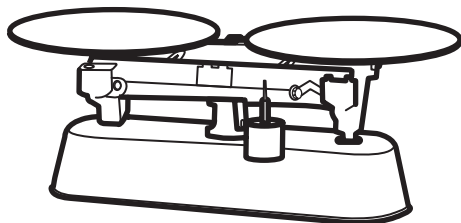
- ◆ Used to make coffee and bundt cakes
- ◆ Allows the cake to cook evenly and faster, without over browning
- ◆ Available in various sizes, from miniature to very large cakes
- ◆ Made of metal or silicone

Baking tools and utensils

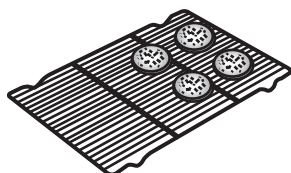
Key terms:

- **Aerate**—When an object or substance is penetrated by circulating air
 - **Nylon**—A strong, very flexible, plastic-like material
 - **Uniform**—Consistent, or the same throughout
 - **Volume**—Total amount of space an object or substance occupies
- Baker's scale—Two platforms with one holding the ingredient to be weighed and the other holding the weight(s)

Note: Also called a balance scale



- ◆ Used to accurately weigh ingredients
- ◆ Measures the weight of an ingredient, instead of **volume** (measured with a measuring cup or spoon)
- ◆ Is resistant against the ingredient that is used as a scale
 - Counter balance—Balances the scoop
 - Ounce weight—Weighs fractional ounces up to one pound, lighter weights
 - Pound weight—Weighs larger amounts, heavier weights
- Cooling rack—A rack made of closely placed metal wires or bars

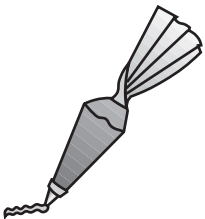


- ◆ Used to cool foods after being removed from a hot oven

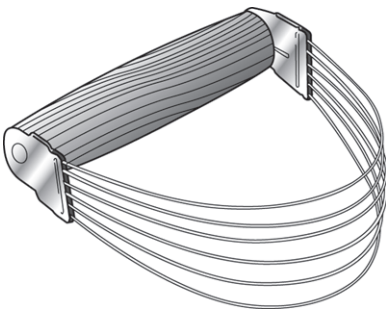
- ◆ Has short feet to keep the heat off the counter and allow air beneath the item being cooled to cool it quicker
- ◆ Comes in round, square, and rectangular shapes
- Dough cutter/bench scraper—A flat square of metal or plastic with a grip along one side



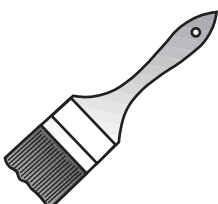
- ◆ Used to cut and portion dough and to scrape tabletops with the side opposite the grip
- ◆ Measures about 5 x 3 inches in size
- Pastry bag—A funnel-shaped bag



- ◆ Used to pipe soft ingredients onto foods
Examples: Squeezing and shaping mashed potatoes, icing, butter, deviled egg filling, whipped cream, and meringue; filling cannolis, jelly doughnuts, and cream horns
- ◆ Used by placing soft ingredient in the bag, then rolling or twisting the bag tightly, pushing the ingredient towards the pastry tip in the narrow opening at the bottom of the bag.
- ◆ Can be made of plastic, parchment or wax paper, **nylon**, polyester, or waterproof cotton
- Pastry blender—Tool used to cut fat into flour when making pastry doughs



- Pastry brush—A brush that resembles a paint brush with bristles attached to a handle



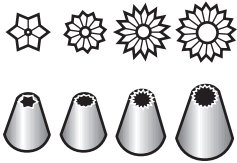
Hand Tools and Utensils

- ◆ Used to brush liquids onto foods

Examples: Melted butter brushed onto bread, eggwash brushed onto pastries

- ◆ Includes handle that is commonly made of wood or plastic; bristles often made of silicone or boar
- ◆ Comes in a variety of sizes and can be flat or round

- Pastry tip—A small cone-shaped tip that fits into the narrow end of a pastry bag



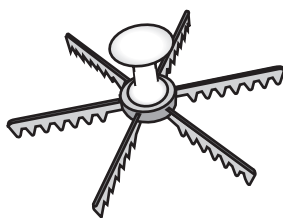
- ◆ Used to make designs with a pastry bag, such as star, flower petal, leaf, and other shapes
- ◆ Used to create a decorative pattern, as soft ingredients inside a pastry bag are squeezed through the tip
- ◆ Made of plastic or metal

- Pastry wheel—A disk with very sharp edges that is attached to a handle

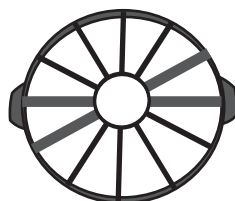


- ◆ Used to cut and decorate the edges of all types of flat doughs
- ◆ Contains wheels with zig-zag patterns to make fluted cuts of pastries and doughs and to emboss fondant
- ◆ Comes in 2 to 4 inch sized wheels

- Pie or cake marker—A template for marking slices on a pie or cake



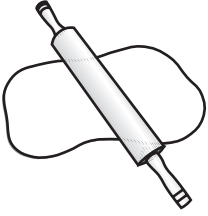
Pie marker



Cake marker

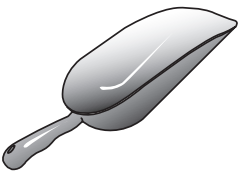
- ◆ Used to mark pie or cake for portion control and to create equally sized portions
- ◆ Used to allow steam to escape during baking
- ◆ Placed in a pie or cake before or after cooking

- Rolling pin—A cylindrical tool for shaping dough



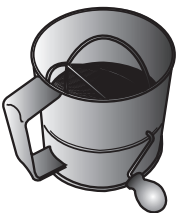
- ◆ Used to roll dough to desired thickness
- ◆ Used to roll soft doughs flat and crush food items
Examples: Rolls out bread dough and pie crust, crushes cookies and crackers
- ◆ Roller pins consist of a rolling cylinder attached to two handles
- ◆ Rod rolling pins consist of a cylinder that tapers on each end
- ◆ Hollow rolling pins can be filled with water for the right degree of heaviness
- ◆ Made of wood, marble, glass, plastic, or metal
- ◆ Is often placed in a refrigerator so dough doesn't stick to it

- Scoop—A deep bowl attached to a handle



- ◆ Used to scoop ingredients from containers
Examples: Ice from the ice machine, nuts from a barrel, flour from a canister
- ◆ Can be used as an informal measure
- ◆ Made of plastic or metal

- Sifter—A cup with a wire mesh bottom



- ◆ Used to sift, mix, and sprinkle dry ingredients
- ◆ Used to **aerate** powdery ingredients, giving them more volume

Examples: Sifting flour, mixing flour, soda, and salt for cookies, sprinkling and aerating powdered sugar onto the top of a coffee cake

Hand Tools and Utensils

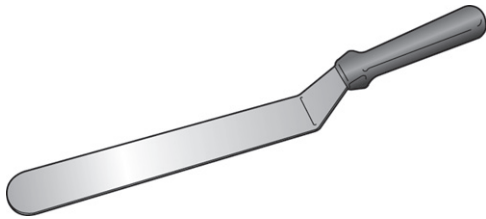
- ◆ Contains a rotary blade or piece of metal that passes across the wire mesh as a crank or trigger type handle is moved
- ◆ Allows for a standard measure and provides a **uniform** texture

Food handling tools and utensils

Key term:

- **Hinge**—A movable joint that holds two objects together

- Offset spatula—A multi-purpose metal spatula



- ◆ Handle offset for precision
- ◆ Used to mix, spread, or scrape food
- Rubber spatula—A flat-bladed, flexible scraper, attached to a wooden or plastic handle



- ◆ Used for scraping, stirring, smearing, packing, and leveling

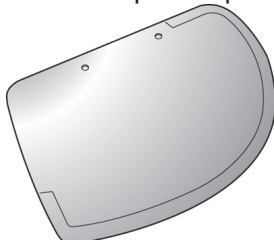
Examples: Scraping batter from the edge of a mixing bowl, smearing frosting evenly onto a cake, packing brown sugar into a measuring cup, leveling flour in a measuring cup

- ◆ Allows for ease of scraping because of its rounded edge
- Straight-edged spatula—A metal spatula with a straight edge

Note: Also called a turner



- ◆ Used to turn foods on a flat-top grill and to serve foods on a buffet
- ◆ Slides easily under food because of its straight edge
- Plastic scraper—A plastic tool used to scrape down bowls



- Pie or cake knife—Utensil with a flat, triangular-shaped bottom and a serrated edge

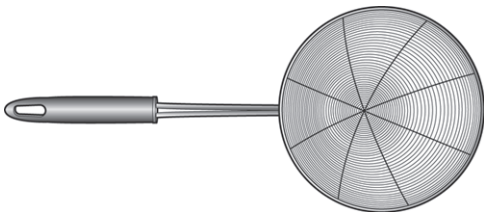


- ♦ Used to cut and serve pie or cake
 - ♦ Has a flat, triangular-shaped bottom to easily push under crust and pick up pieces of pie or to lift sections of baked cake
 - ♦ Has a serrated edge that helps to cut through cakes and pies
 - ♦ Made of stainless steel or plastic
- Chef's fork—A large fork with two long, sturdy tines and a long handle

Note: Also called a kitchen fork or a braising fork



- ♦ Used to spear and hold bulk meat while carving
 - ♦ Used to pick up, move, and position food during cooking
 - ♦ Contains sharp spears that can puncture whole birds to check for juiciness or peel back skin
 - ♦ Has a long, composite or wooden handle to prevent finger burns and fat splattering on the hands
- Skimmer—A shallow, wire mesh basket attached to a long handle



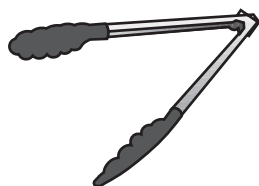
- ♦ Used to retrieve small pieces of food from liquids
 - ♦ Used to remove unwanted fat from the surface of soup or stock
- Slotted spoon—A large spoon with slots in the bowl



- ♦ Used like a skimmer to remove cooked food from liquids
- ♦ Contains slots that allow the liquid to pass through, while the food catches on the spoon

Hand Tools and Utensils

- Tongs—A **hinged** utensil with two long gripping arms



- ◆ Ends are often scalloped and spoonlike
 - ◆ Used to serve ready-to-eat food
 - ◆ Used to turn foods while cooking
 - ◆ Used to pick up hot food items right out of the oven, off the stove, or out of the fryer
- Ladle—A deep spoon-shaped vessel with a long handle



- ◆ Used to transfer liquids, such as soups, stock, and sauces, from one place to another
- Serving spoon—A large spoon containing slots or perforations



- ◆ Used to drain unwanted liquid
 - ◆ Used to stir and mix food
 - ◆ Used to serve food
- Wooden spoon— A multipurpose cooking spoon made of wood



- ◆ Used to prepare and stir food
- ◆ Used to safely stir without scratching the bottom of the pan or bowl
- ◆ Used to break apart frozen meat and vegetables that are stuck together
- ◆ Can withstand hot and cold temperatures

Rules to observe when using and caring for utensils

Caution: Never place knives unattended in work area.

Key term:

- **Shards**—Broken pieces of glass

- Use and care of metal dishes and utensils
 - ♦ Do not leave in a sink full of water, or rusting will occur.
 - ♦ Metal conducts heat rapidly, so be careful not to let metal pans scorch.
 - ♦ Pans left on a burner unattended will scorch.
 - ♦ A thin metal pan can warp when cold water is poured into a hot pan.
 - ♦ To remove burned on food, fill a pan with water (add a utensil if needed), heat it until it boils, turn off the heat and allow it to soak until the utensil has cooled.
 - ♦ Wash with mild soap and warm water.
 - ♦ Scrub with a nylon pad.
 - ♦ Nonstick coating will scratch off if steel wool or metal abrasive is used to scrub it.
- Use and care of glass dishes and utensils
 - ♦ Only use heatproof glass in the oven.
Examples: Loaf pans, roasting dishes, pie plates
 - ♦ When cooking on a range or external heat source, only use flameproof glass.
Examples: Coffeepots, teakettles
 - ♦ An iron grid between the heat source and the glass dish will protect the utensil and promote heat conduction.
 - ♦ Glass cannot withstand rapid temperature changes.
Example: Do not place a hot glass dish in a sink full of water to cool it off.
 - ♦ To wash glass utensils and dishes, use soapy water and a scratchy mesh pad to remove baked-on food.
 - ♦ Do not scrub glass so hard that it scratches, as the scratches will trap food when used in the future.
 - ♦ There tends to be more water evaporation when cooking with glass dishes, so add a little extra water to the food.
 - ♦ Glass dish lids don't always fit tightly, so add a little extra water to the food.
 - ♦ If glass breaks in the kitchen, pick up the large pieces of glass with wet paper towels and throw away; sweep up any smaller **shards** of broken glass.

Hand Tools and Utensils

- Use and care of wooden dishes and utensils
 - ◆ Hand wash wooden dishes and utensils in warm, soapy water.
 - ◆ The heat from a dishwasher dries out wood and causes it to eventually crack.
 - ◆ Do not allow wood to soak in water, as it will expand and warp.
 - ◆ Wood can be renewed with use of mineral oil; cooking oils (such as olive and peanut oil) can go rancid and ruin the spoon.
 - ◆ When oiling, wipe on the mineral oil, allow it to soak in a few minutes, and wipe clean; wash before cooking use.
 - ◆ Wood can be safely sanded to remove the “fuzzy” appearance or stains, but be sure to sand away any splintering and wash before cooking use.



Assignment

Use a Steel

Name _____ Overall Rating _____

Date _____

Instructions

When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the evaluation criteria.

Tools, Equipment, and Materials

- Steel
- Knife

Procedure

Caution: Use extreme care when working with knives.

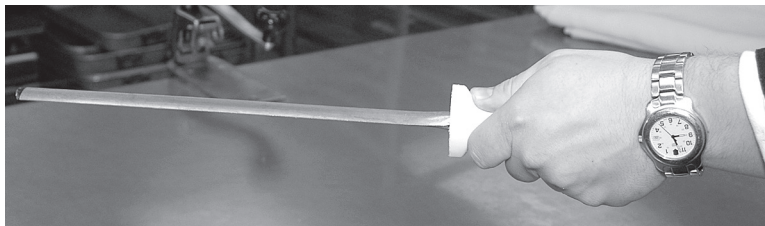
1. Stand in a balanced position that will allow you to control arm movement.

Note: The steel will remain stationary while the knife is moved with wrist action.

2. Grasp the knife and steel firmly by their handles.

Note: The metal protrusions of the guard on the steel are designed to protect the user's hand.

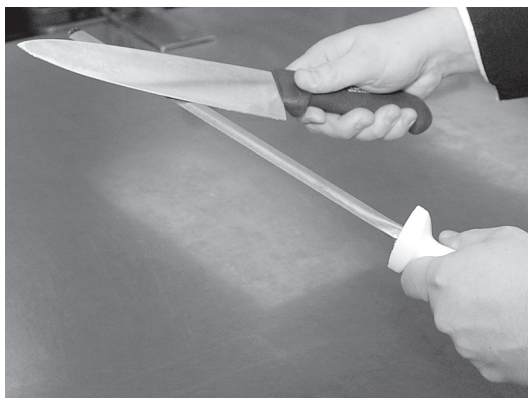
3. Hold the steel at approximately a 45-degree angle at arm's length away from the body.



4. Start with the knife in a vertical position, lightly touching heel of knife to tip of steel at a 20-degree angle to the steel.

5. Begin to pass the knife edge along the length of the steel, maintaining light pressure and a constant 20-degree angle.

Note: This is done with wrist action while the arms remain still.



Hand Tools and Utensils

6. Continue in a smooth motion, using the entire length of the steel.

Note: Listen for a melodic ring as you use the steel; if you hear a grinding noise you are applying too much pressure.

7. Complete the movement by passing the tip of the knife across the steel.

Note: Do not strike the guard with the knife.

8. Start the next stroke with the knife on the opposite side of the steel at a 20-degree angle to the tip of the steel.

9. Pass the knife along the steel as before, maintaining light pressure and a constant 20-degree angle.

10. Stroke the knife on the steel five times on each side.

11. Clean tools and materials and return them to proper storage.

12. Clean the work area.

Evaluation Criteria	Rating
• Knife blade honed to a smooth, sharp cutting edge	_____
• Safety precautions observed	_____

Evaluator's Comments _____

Assignment

Sharpen a French Knife

Name _____ Overall Rating _____

Date _____

Instructions

When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the evaluation criteria.

Tools, Equipment, and Materials

- Sturdy work table
- Sharpening stone
- Steel
- Water or mineral oil
- French knife

Procedure

Caution: Use extreme care when working with knives.

1. Place the sharpening stone near the edge of the table on a damp towel to prevent slippage.

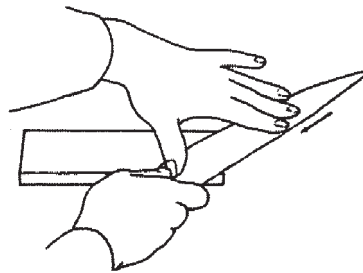
Note: For general sharpening, use a medium texture stone; for a severely abused knife, start with a coarse texture stone.

2. Lubricate the stone with mineral oil or water.

Note: Vegetable oil is not recommended as it may leave a sticky film on the stone.

3. Stand in a balanced position that will allow you to use the full surface of the stone.

4. Grasp the knife firmly by the handle.

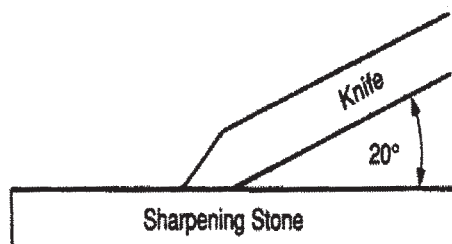


5. Use the four most comfortable fingers of the guiding hand to stabilize the knife and maintain constant pressure on the blade.

Note: The guiding hand is the one not holding the knife.

6. Place the heel of the knife at one corner of the stone close to the table edge.

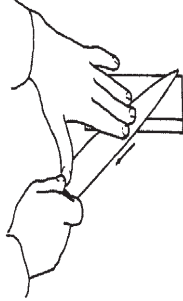
7. Set the blade at a 20-degree angle, touching the stone.



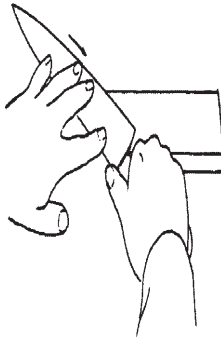
Hand Tools and Utensils

- Begin to draw the knife across the stone, gently, but with abrasive action on the blade.
- Continue movement in a smooth action, maintaining angle and pressure through the blade tip across the surface of the stone.

Note: Five strokes for each side of the blade will generally be enough.



- Turn the knife around so that the side of the blade just sharpened is now facing up and use the guiding hand to establish and maintain constant pressure.



- Set the knife at a 20-degree angle and position the heel at the opposite corner of the stone (Figure 4).
- Draw the knife across the stone in the same manner as the opposite side (Figure 4).
- Use a steel on the knife edge to finely hone it.
- Clean tools and materials and return them to proper storage.
- Clean the work area.

Evaluation Criteria	Rating
• Knife blade honed to a smooth, sharp cutting edge	_____
• Safety precautions observed	_____

Evaluator's Comments _____

Assignment

Use a Knife Properly

Name _____ Overall Rating _____

Date _____

Instructions

When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the evaluation criteria.

Tools, Equipment, and Materials

- French knife (Chef's knife)
- Cutting board
- Carrots to be cut

Procedure

Method A—Knife's tip as fulcrum

1. Curl your fingertips back and grip the carrot with your thumb and three fingertips.
2. Hold the knife in your other hand, keeping the tip of the knife on the cutting board, and lift the heel of the knife.
3. Use the second joint of your index finger as a guide to slice the carrot with a smooth, even, downward motion.



4. Adjust your index finger as you work to ensure equally-sized slices.
5. Continue slicing while moving your thumb and fingertips down the carrot, making sure to use the tip of the knife for support.

Method B—Wrist as fulcrum

1. Curl your fingertips back and grip the carrot with your thumb and three fingertips.
2. Hold the knife in your other hand and use the second joint of your index finger as a guide to slice the carrot.
3. Lift the tip of the knife and slice by bringing the knife slightly toward you and down through the carrot.



Hand Tools and Utensils

- 4. Use your wrist rather than your elbow to move the knife, making sure not to use too much downward pressure.
- 5. Have your instructor evaluate you as you demonstrate the two cutting methods.
- 6. Clean tools and materials and return them to proper storage.
- 7. Clean the work area.

Evaluation Criteria	Rating
• Method A performed correctly	_____
• Method B performed correctly	_____
• Safety precautions observed	_____

Evaluator's Comments _____

Assignment

Demonstrate Classic Cuts

Name _____ Overall Rating _____

Date _____

Instructions

When you are ready to perform this task, ask your instructor to observe the procedure and rate your performance using the evaluation criteria.

Tools, Equipment, and Materials

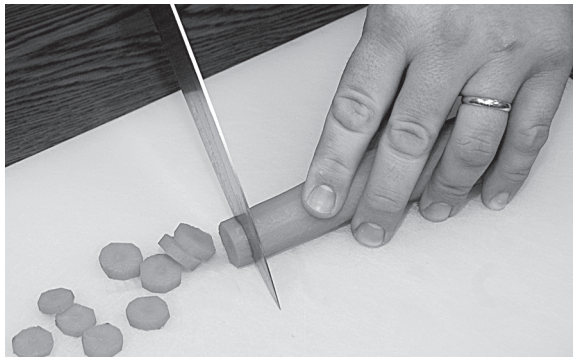
- Sturdy work table
- Cutting board
- French knife (Chef's knife)
- Carrot, celery, and potato to be cut

Procedure

Caution: Use extreme care when working with knives.

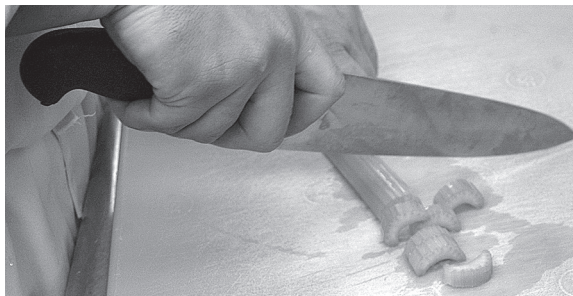
Slicing—Rondelle cut

1. Place a peeled carrot on the cutting board.
2. Hold the knife perpendicular to the carrot.
3. Cut evenly into small, thin circular slices.



Chopping

1. Place celery stalk on the cutting board.
2. Keep the tip of the knife in contact with the cutting board and lower the knife with a firm and rapid motion back and forth over the celery.
3. Cut celery into pieces that are roughly the same size.



Hand Tools and Utensils

Dicing—Allumette

1. Place a peeled potato on the cutting board.
2. Trim the ends off of the potato and discard.
3. Square off the sides of the potato and trim potato so that slices will be 2 inches long. Slice the potato lengthwise into $\frac{1}{8}$ inch thick slices.
4. Stack the slices, making sure to align the edges.
5. Cut slices evenly into long, thin matchstick-shaped pieces measuring $\frac{1}{8}$ inch on the sides and 2 inches long.



6. Have instructor evaluate your cut vegetables.
7. Clean tools and materials and return them to proper storage.
8. Clean the work area.

Evaluation Criteria	Rating
• Cuts performed to specifications	_____
• Safety precautions observed	_____

Evaluator's Comments _____

