Safety, Mise en Place, Basic Culinary Preps, Knife Skills, & Stocks

Learning Objectives

- Demonstrate effective workstation set up and *mise en place*.
- Safely hold and handle a knife.
- Select a knife appropriate for its intended use.
- List, identify, and execute commonly used knife cuts.
- Discuss the major categories and key characteristics of stocks.
- Identify differences between brown and white stocks.
- Review parameters for the day five market basket challenge.

Kitchen Responsibilities

Cleanliness

- Keep stations clean at all times
- Clean small equipment as you go

Cross-Contamination Prevention

- Wash hands, cutting boards, knives, etc. when switching between meats/ vegetables

Food Safety

- Properly handle and store all food
- Wear gloves when handling ready-to-eat food

Clean & Store

- Store equipment correctly
- Leave kitchens clean at class end

What is Mise en Place?

Meaning: French for “everything in its place.”

Purpose: to create a smooth, efficient cooking process by being fully prepared

Mental readiness:

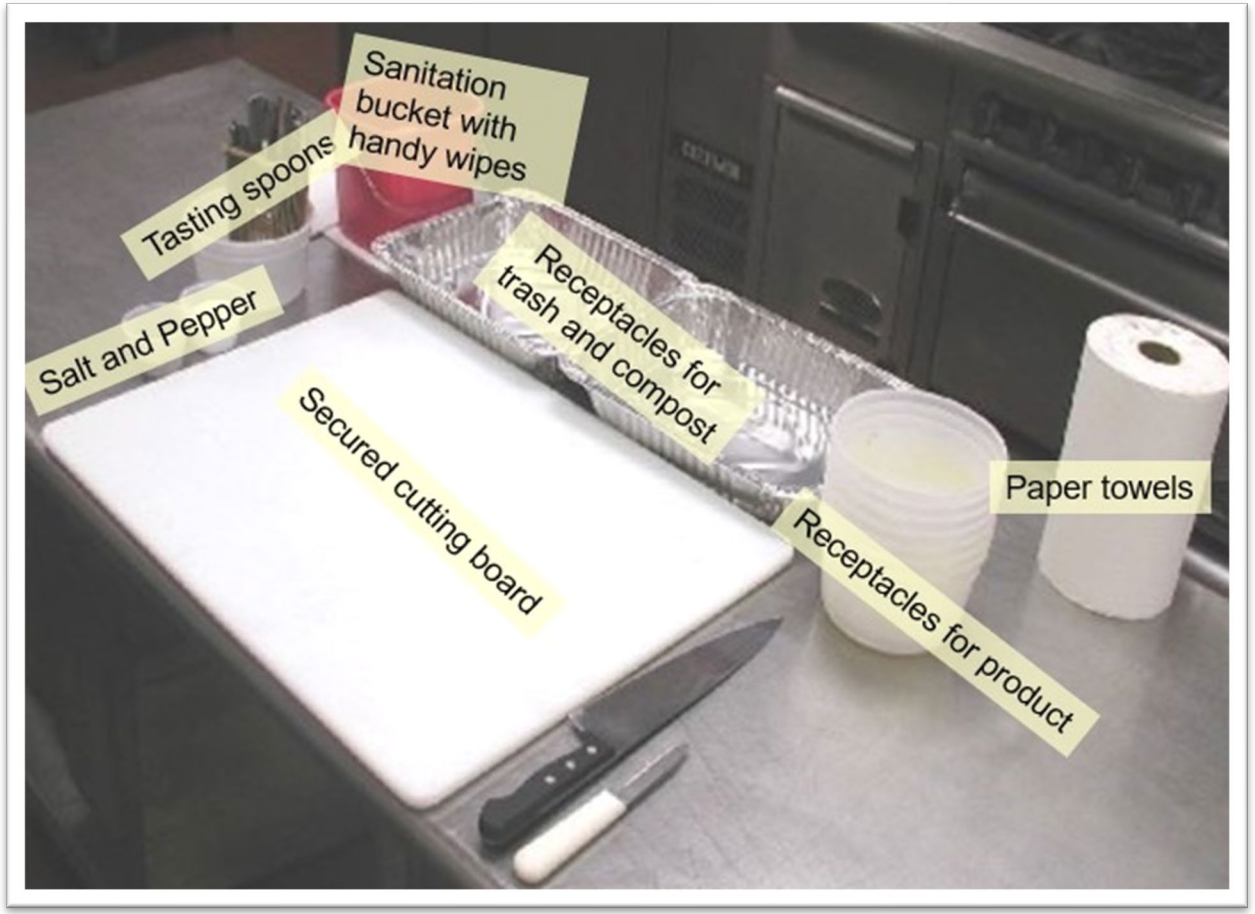
- Review the entire recipe
- Understand terms and techniques
- Visualize the cooking process
- Focused mindset

Physical readiness:

- Organized tools and ingredients
- Clean space

Workstation Mise en Place

- Clean, sanitized equipment
- Cutting board secured (on damp towel/sheet pan for messy work)
- Bain-maries with hot water for holding tools
- Salt, pepper, tasting spoons, paper towels, sanitation bucket
- Trash & compost bins within reach
- Work surface set at the right height
- Proper timers, thermometers, tools



Recipe Mise en Place

Before cooking:

- Read the entire recipe, clarify any terms
- Check recipe yield, timing, temperature
- Gather & measure all ingredients accurately
- Complete any pre-prep steps (soaking, marinating)

Execution tips:

- Follow steps in order
- Cook with attention to timing
- Use recipes as flexible guides, not strict rules

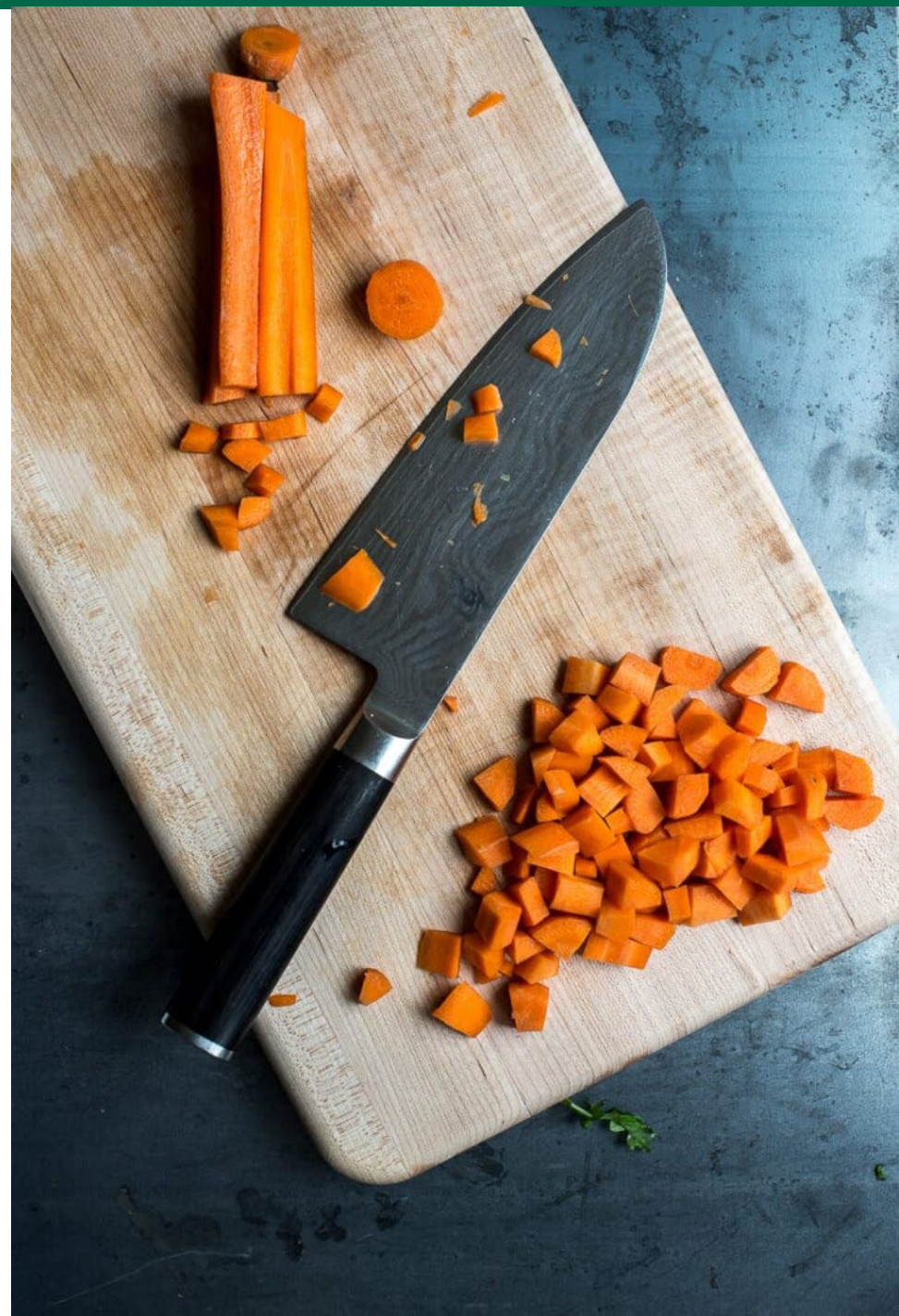
Knife Safety

Always…

- Use a sharp knife
- Use a cutting board
- Place knives on flat surfaces away from table edge
- Have the blade facing away from you
- Keep knives in clear sight – never covered
- Hold knives firmly & cut away from you

Never…

- Grab blindly for a knife
- Pass a knife using the blade
- Carry knifes with the point up

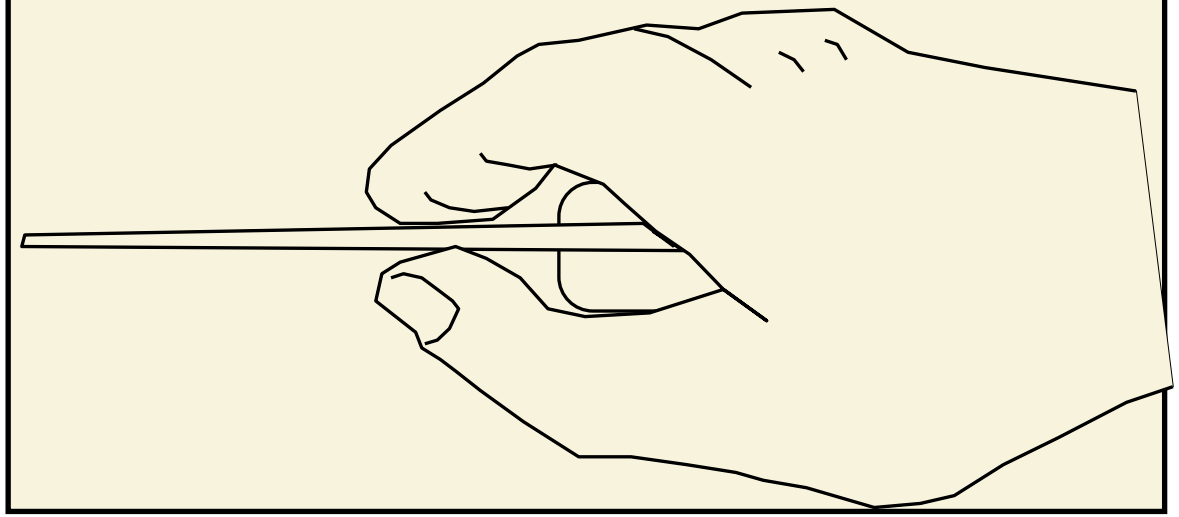


Anatomy of a Knife

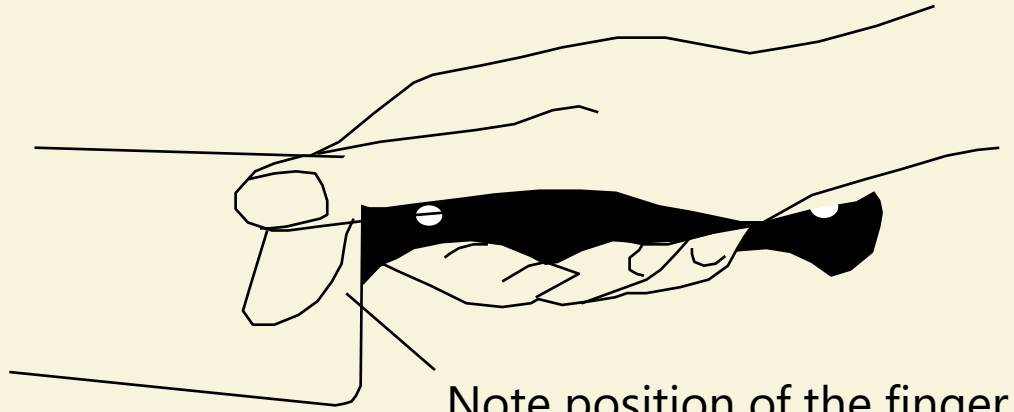
- **Cutting edge/blade:** can be long & thin, wide & heavy, curved or straight
- A dull knife is a dangerous knife, must remain sharp
- **Handles:** wooden, plastic, metal

Holding a Knife

Top View



Side View



Note position of the finger behind the blade for support

- Grasp the knife by the handle, allowing your thumb and index finger to rest on the blade for support
- When walking, hold with the tip pointing down and have a firm grip around the handle

Knife Selection

Slicer

Paring Knife

French Knife

Boning Knife

Serrated Knife

- **Slicer:** mainly used to slice cooked meats and poultry
- **Paring Knife:** peeling, trimming, shaping fruits, vegetables
- **French Knife:** chopping, slicing, dicing, mashing
- **Boning Knife:** cutting meat away from bones
- **Serrated Knife:** slicing through crusts of bread

Julienne & Dice Vegetables

1. Square off the ends and sides
2. Slice into even slabs of the same thickness
3. Stack the slabs and slice into even sticks (julienne)
4. Gather the sticks and cut into even cubes (dice)

Julienne Cut Sizes

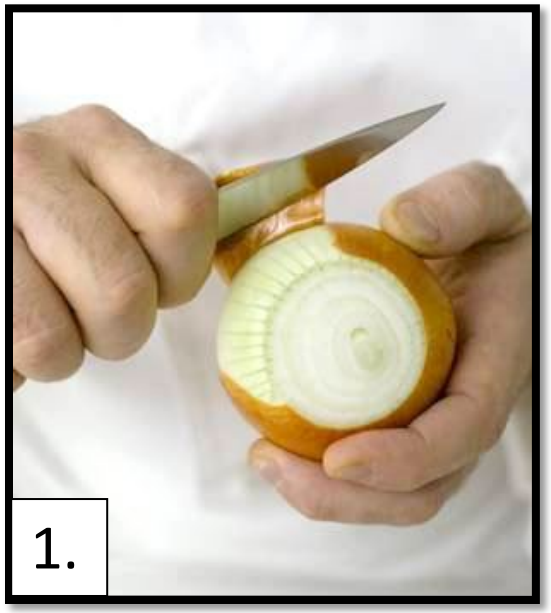
Fine Julienne
1/16 x 1/16 x 1-2 in.

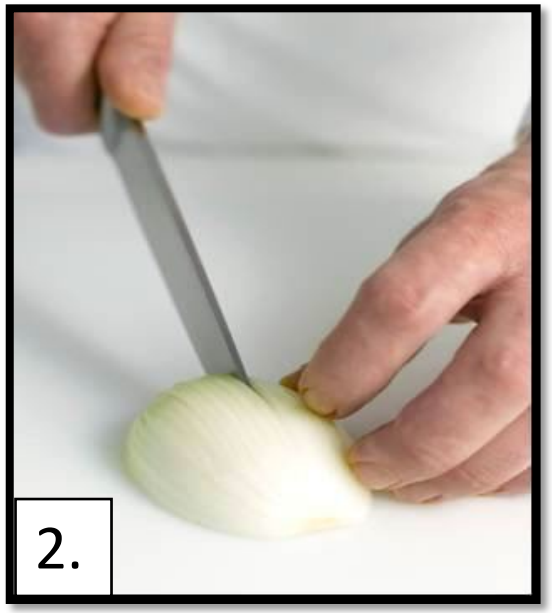
Julienne/Allumette
⅛ x ⅛ x 1-2 in.

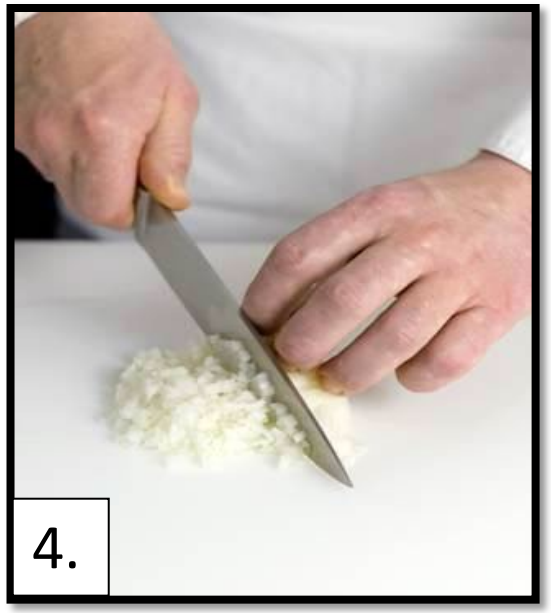
Batonnet
¼ x ¼ x 2 - 2½ in.

Dice & Mince Onions

1. Cut off tip end, peel, and cut through root to tip
2. Make several evenly spaced parallel cuts, without cutting the root
3. Make two to three horizontal cuts, without cutting the root
4. Make even crosswise cuts working from tip to root

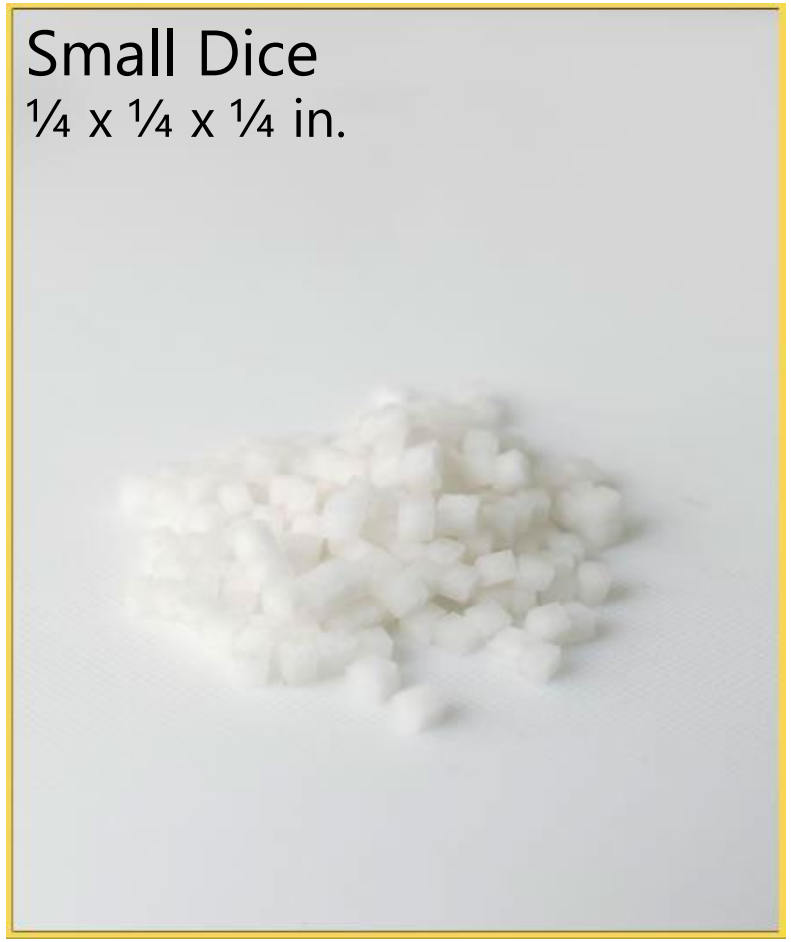




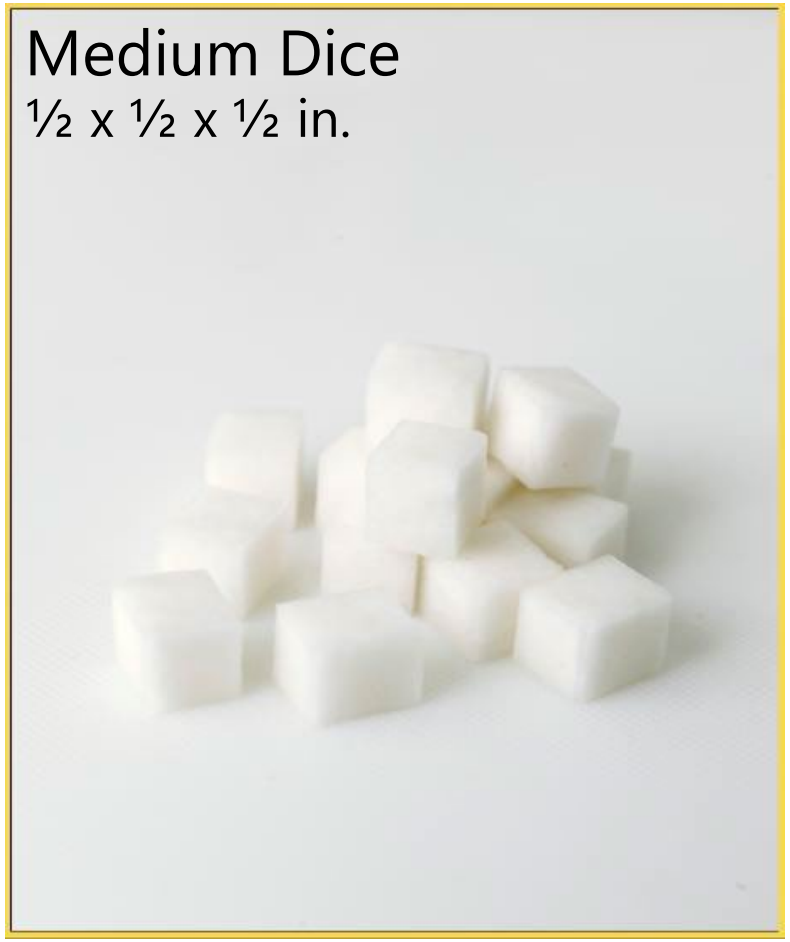


Dice Cut Sizes

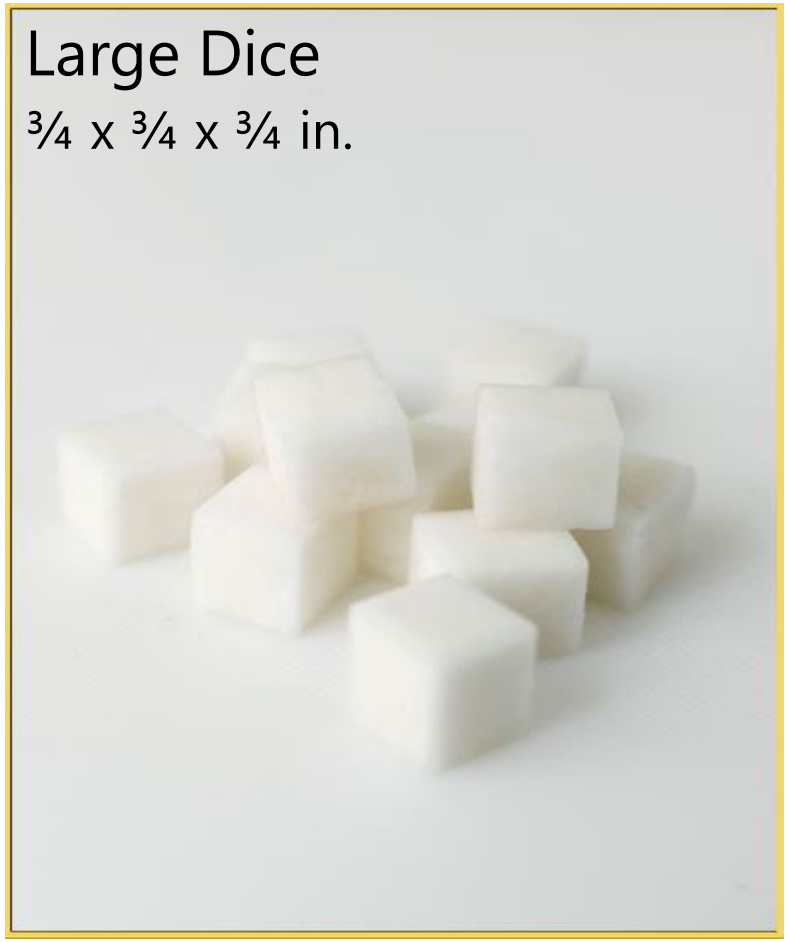
Small Dice
¼ x ¼ x ¼ in.



Medium Dice
½ x ½ x ½ in.



Large Dice
¾ x ¾ x ¾ in.



Mince Garlic

1. Peel cloves
2. Slice cloves
3. Cut cloves into a rough chop
4. Using a rocking motion, chop to desired fineness

Chop & Mince Herbs

1. Wash, dry, and remove leaves from stems; roll into a tight ball and chop roughly
2. Move hand to front of knife and chop using a rocking motion
3. Continue cutting to desired fineness

Chiffonade Herbs

1. Remove leaves
2. Stack the leaves, placing smaller leaves on top of larger leaves
3. Roll into a cylinder
4. Make fine parallel cuts across the cylinder

Other Classic Vegetable Cuts

Tourné
2 in. long with 7 faces

Oblique
Uniform pieces with 2 angled cuts

Rondelle
½ to ⅛ in. thick rounds

Basic Culinary Preparations

- ***Sachet d'épices*:** bag of spices
- ***Bouquet garni***: bundle of herbs wrapped in cheesecloth
- ***Mirepoix*:** diced celery, onions, carrots, parsnip (*variation*)
- **Onion *brûlé*:** burnt onion
- **Onion *piqué*:** onion, bay leaf, cloves
- ***Remouillage*:** extracting further flavor and nutrients from bones to create a second stock
- **Infusion:** steeping herbs, spices, or fruits in liquid to extract flavor, aroma, or benefits

Stocks

- A flavorful liquid produced by simmering meaty bones, poultry, seafood, and/or vegetables with aromatics in water until their flavor is extracted

Uses:

- **Soups:** chicken noodle, cream of tomato, consommé
- **Sauces:** gravy, demi-glace, BBQ sauce
- **Braises/stews:** beef stew, vegetable braise
- **Roasts:** beef brisket, pork loin roast
- **Vegetables/pastas/starches:** marinara sauce, potato, corn, rice

Stock Components

- **Meaty bones:** provides foundation of flavor & body
- **Water:** solvent that extracts flavors & nutrients
- ***Mirepoix*/aromatics**: adds depth, flavor, & nutrient value

Other components:

- Tomato products (brown stock only)
- Mushrooms & white whine (fish stock)

Ratios for 1 Gallon

Broth:

- Meat/bones: 11 lb.
- Cool liquid: 5 qt.
  - If using stock, reduce the amount of meat/bones to 3 lb.
- *Sachet d'èpices*: 1 ea.

Stock:

- Meaty bones: 8 lb.
- Water: measure as required by cooking time
- *Mirepoix*: 1 lb.
- *Sachet d'èpices*: 1 ea.

Simmering Times of Stocks

Brown vs. White Stock

Brown stock

- Coloration from roasted bones and aromatics
- Stronger flavor
- Used for brown-colored sauces, soups, etc.

White stock

- No roasting of bones or aromatics
- More delicate flavor
- Used for light-colored sauces, soups, etc.

General Stock Method

Method

1. Use bones, joints to add body and flavor
2. Simmer ingredients to extract their flavors
3. Skim out ingredients
4. Add mirepoix/sachet
5. Strain the stock to remove solids
6. Cool stock in ice bath






How to Skim and Degrease

Skimming:

- Used to remove impurities
- Impurities will rise to the surface, collect along the edge of the pot away from the heat

Degreasing:

- As the fat collects along the edge, it can be ladled from the top of the stock

Recipe Conversion Factor (RFC)

A simple formula used to change the yield of any recipe, increasing or decreasing the quantity produced

To find RFC:

Divide the desired yield by the original recipe yield

To create the revised yield:

Multiply ingredient amounts by the RFC

$$\frac{\text{New Yield}}{\text{Old Yield}} = \text{Recipe Conversion Factor (RFC)}$$

$$\text{Recipe Ingredient Amount} \times \text{RFC} = \text{Revised Yield}$$

Recipe Conversion Factor Example

$$\text{Recipe Conversion Factor (RCF)} = \frac{\text{Desired yield (New)} \quad 2\ \textit{quarts}}{\text{Current yield (Old)} \quad 4\ \textit{quarts}}$$

Or

$$\text{Recipe Conversion Factor (RCF)} = \frac{\text{Desired servings (New)}}{\text{Original servings (Old)}}$$

2/4 = RCF .5

Multiply ingredients by .5 to create revised yield.

*** Remember that both yields must be expressed in the same terms (units of measurement) before using the formula.

Market Basket Challenge Guidelines

On day five of this course, you will:

- Create a two-course menu using available kitchen ingredients that reflects the course's taught tastes and techniques.
- Teams have 3 hours to prep and plate.
- Menu must include:
  - **1st Course**: hot or cold soup, salad, or appetizer
  - **Main Course**: Must include a featured component, starch, vegetable, and sauce
- Yield 6 portions total: 1 show plate + 5 on platters

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Any Questions?