

Tomato Sauce*Unit 2: Plants, Fungi, Algae**Duration: 90 minutes*

Standards:

National Standards for FCS

8.5.2 Demonstrate professional skill for a variety of cooking methods including roasting, broiling, smoking, grilling, sauteing, pan frying, deep frying, braising, stewing, poaching, steaming, and baking using professional equipment and current technologies.

8.5.7 Prepare various fruits, vegetables, starches, legumes, dairy products, fats, and oils using safe handling and professional preparation techniques.

CT Career and Technical Education Performance Standards

K.31 Describe and demonstrate the process for preparing various stocks, soups, and sauces.

K.32 Describe and demonstrate the process for preparing various fruits, vegetables, starches, and farinaceous items.

Description:

Tomatoes are a seemingly universal ingredient nowadays, but have a complex history on how they came to be a part of our culinary lexicon. Analyzing a variety of resources, students will consider the diversity of tomatoes and the products we make from them, and how we have ended up with so much choice.

Objectives:

- Analyze tomatoes from a geographic, horticultural, and historical perspective.
- Determine which varieties of tomatoes are best suited for sauce.

Vocabulary:

- | | |
|--|--|
| ■ Hybrid - first generation (F1) of two genetically distinct parental lines | ■ Tomato - edible berry of the plant <i>Solanum lycopersicum</i> |
| ■ Heirloom - older cultivar of a plant that has been handed down for generations | ■ Artisanal - (of a product, especially food or drink) made in a traditional or non-mechanized way |


Materials:




- Ingredients and kitchen equipment for recipes below
-

Recipe:


-  **Fresh Tomato Sauce**
 -  **Roasted Tomato Sauce**
-

Procedure:





- To highlight the diversity of tomato varieties available to today's growers, present to students a variety of tomato descriptions from seed companies like [Johnny's Seeds](#), [Burpees](#), or [Seed Savers Exchange](#). Show students the description for each variety, and challenge them to draw or imagine what they think the variety actually looks like. Have them consider words like "heirloom" or "artisanal" and what they think those could mean.
 - Example from Johnny's Seeds "[Lemon Boy Plus](#)"
 - "New! A delicious yellow tomato.
An updated version of the classic Lemon Boy tomato with added disease resistance and sweet, tangy flavor — a marked improvement over typical yellow tomatoes. The flattened-round, 7–8 oz. Beefsteak fruits are consistent in size, shape, and quality with very few blemishes. A high-yielding variety with good firmness. Comprehensive disease package offers wide adaptability and keeps the plants healthy and the fruits clean. Can be harvested bright lemon-yellow to deeper golden-yellow when fruit exhibits light checking and a subtle blush at the blossom scar. Harvest a bit under ripe if you prefer a more acidic flavor profile. High resistance to Alternaria stem canker, *Fusarium* crown and root rot, *Fusarium* wilt races 1–3, gray leaf spot, tomato mosaic virus, *Verticillium* wilt; and intermediate resistance to nematodes and leaf mold. Indeterminate. Avg. 126,400 seeds/lb. Packet: 30 seeds.
 - Which of these words would help you visualize what the tomato looks like? Which would you consider more marketing terms?
 - Go through this exercise with a few different examples as a way to introduce students to different tomatoes and their varieties.
- Show the presentation  **F1-2.07 Tomato Slides**, highlighting the history and uses of tomatoes. The presentation also reviews how tomatoes are bred and the characteristics breeders might be looking for. Be sure to highlight how characteristics can be thought of from both a perspective of cultivation (disease resistance, yield, etc) and culinary applications (taste, color, texture, etc).

3. Students will make two variations of tomato sauce to compare different tastes and cooking methods. Teacher will check in with groups and ask questions about taste and cooking methods.
 - a.  **Fresh Tomato Sauce**
 - b.  **Roasted Tomato Sauce**
 4. After completing the recipe for each, have students taste their sauce and fill out:
 -  **Comparison: simple simmered and roasted tomato sauce**
 5. Ask students to share their comparisons.
-

Assessment(s):

- Formative assessment: Students explore different varieties of tomatoes using seed catalogs and a slideshow.
- Summative assessment: Students make tomato sauce.
 -  **Comparison: simple simmered and roasted tomato sauce**

Resources:

- Seed Catalogs: [Johnny's Seeds](#), [Burpees](#), and [Seed Savers Exchange](#).
 - Seed example: [Lemon Boy Plus](#)
 -  **Comparison: simple simmered and roasted tomato sauce**
 -  **F1-2.07 Tomato Slides**
 -  **Fresh Tomato Sauce**
 -  **Roasted Tomato Sauce**
-

Extensions:

- [Why the tomato was feared in Europe for more than 200 years](#)
- [Factsheet on Growing Tomatoes](#)