

LEMONADE MAKING

GRADES 6-12, 1-2 HOURS

DESCRIPTION

A lemonade expert will teach your class the basics of taste science, lemonade making and beverage food safety. Teams of students will apply what they learn through a hands-on exercise where they create a unique lemonade recipe by balancing sweet to sour ratio and garnish for flavor complexity and visual presentation. Teams record recipes on a 1-page Menu Card that includes team name, recipe name, ingredients, process and product image.

GRADES: 6-12

LENGTH OF SESSION

1-2 hours

SESSION GOALS

1. Learn the science of taste.
2. Learn how to tell a food story.
3. Learn food safety for beverages.
4. Apply learning through mixology.

SITE REQUIREMENTS

Water

Washing facilities (for hands & fruit)

Drawing Supplies

MATERIALS

Provide the following or purchase from Lemonade Alley for \$5/student/class:

1. Jelly beans (3 per student).
2. Small cups (3 oz) & marker to name cups.
3. Sweeteners (granulated sugar, agave, honey, stevia, etc.)
4. Garnishes (berries, herbs, syrups, Pop Rocks, Red Vines, etc.).
5. Lemon Juice or lemons.

EQUIPMENT

Lemonade Alley will supply these items:

1. 1 pitcher per team.
2. Mixing utensils (OPTIONAL: if citrus, knives, boards & squeezers).
3. Showcase team menu holders.

PRE-CLASS PREPARATION

1. Add 3 jelly beans into & student name on each cup.
2. Prepare sweeteners, water, lemon juice or lemons and garnishes on a display table.
3. Make copies of handouts, one per team.



SURVEY: RETURN TO BIZGENICS

LEMONADE MAKING, GRADES 6-12

SCHOOL: _____

DATE: _____

CLASS(ES): _____

GRADES: _____

TEACHER(S): _____

CIRCLE ONE: Public | Public Charter | Public Title 1 | Private | Other Youth Group

GENDER BREAKDOWN

#Female:

Male:

Other Gender:

ETHNIC BREAKDOWN

# American Indians or Alaskan Natives:	
# Asians or Asian Americans:	
# Hawaiian (any percentage):	
# Other Pacific Islanders:	
# Blacks or African Americans:	
# Puerto Ricans:	
#Other Hispanic Latinos:	
# White Europeans or Caucasians:	
# Mixed Race or other ethnicities:	

FEEDBACK

What I liked best:

Suggestions for improvement:

OPTIONAL Testimonial:

Your Name:

Your Title:

CLASS INSTRUCTION

LEMONADE MAKING, GRADES 6-12

INTRODUCE LEMONADE EXPERT(S)

THE SCIENCE OF TASTE

1. Distribute cups/jelly beans.
2. **JELLY #1 – HOLD YOUR NOSE:** Students hold noses and eat a jelly bean.
 - a. Ask, “Can you tell what flavor it is?”
 - b. Ask, “What parts of your tongue taste sweetness?”
 - c. Take a hand count of where sweetness is on the tongue.
 - d. Explain that sweetness is normally more pronounced on the tip or sides of the tongue while salty on tip and front sides, sour on back sides and bitter on back.
3. **JELLY #2 - HOLD/USE YOUR NOSE:** Students eat with plugged nose, then UNPLUG while eating.
 - a. Ask, “Can you taste the flavor better?”
 - b. Take a hand count of who can taste the flavor better.
 - c. Explain that flavor should be bigger as the human nose can detect 10,000 different aromas while the tongue only 5 flavors (sweet, salty, sour, bitter and umami ~ umami is savoriness coupled with an aroma). Studies show that smell is 75-90% of flavor senses.
4. **JELLY #3 - TASTE FOR THE STORY:** Have students determine the jelly bean’s story.
 - a. Explain taste as a story with a smell setup, a beginning taste, a middle taste and an end taste. Getting all of these “notes” right makes beautiful music in the mouth.
 - i. Ask, “what is the opening aroma or smell?” (break the bean in half to smell).
 - ii. Ask, “What is the first flavor?” (sweet, salty, sour, bitter?)
 - iii. Ask, “What is the middle flavor?”
 - iv. Ask, “What is the end or “after-taste” flavor?”

FOOD SAFETY

Wash hands before mixing. Do not touch body parts and if so, wash again. For tasting, pour into cups.

CREATE TEAMS

3-5 students per team.

MAKE LEMONADE

1. Demonstrate juicing techniques, twist/wheel making, basic part proportions of 1 sugar : 1 acid : 6 water, substitutes, creating a unique story with notes of sweet/sour/flavor overtones/aromas/texture.
2. Distribute mixing equipment and Menu Cards.
3. Direct students to visit the resources display table to become inspired and take what they need.
4. Direct students to invent and record ingredients/proportions as they invent.
5. Direct students to make their unique recipe IN THEIR PITCHER, taste test in cups and complete their Menu Card.

PRESENTATIONS & SHARING

Each team talks through their recipe. All teams share lemonade with each other.

MENU

Recipe Name

Team Name

TASTE STORY:

Recipe Image:

Price:

INGREDIENTS:

PROCESS:

Team Members:

