

PRODUCT DEVELOPMENT, SUPPLY CHAIN AND QUALITY ASSURANCE

Description of Activity: One of Culver's signature items is their fresh frozen custard, and they put this delicious creation on display daily using their creative "Flavors of the Day." Have you ever thought about what goes into developing new food products or flavors? In this activity, students will explore the world of product development as they brainstorm unique flavor combinations, identify target audiences and present their ideas to the class.

STUDENT LEARNING OBJECTIVES:

After completing these activities, students will ...

1. Create a unique frozen custard flavor to fit a given scenario.
2. Develop and deliver a short pitch for their new flavor.

SUGGESTED TIME:

60 to 80 minutes (*Time requirements may vary based upon student understanding and class schedule.)

RESOURCES/REFERENCES:

1. Culver's Virtual Field Trip Video, <https://AgExplorer.FFA.org/virtual-field-trips/fresh-frozen-custard-careers-from-dairy-to-dish/>
2. Website: Culver's: Flavor of the Day, <https://culvers.com/flavor-of-the-day>
3. Video: Culver's Flavor of the Day, <https://www.youtube.com/watch?v=fS3qgWx44CM>

EQUIPMENT AND SUPPLIES NEEDED:

1. A copy of the "Custard Creation Challenge" worksheet for each student
2. A copy of "Appendix 1: Frozen Custard Creation Scenarios" cut apart into strips per class
3. Internet access to play the videos in real time or embed them in a PowerPoint ahead of time
4. Various crayons, markers or colored pencils for frozen custard drawings

VOCABULARY:

1. Flavor profile
2. Frozen custard
3. Target audience

STUDENT ACTIVITY SHEETS:

Direct access to student activity sheets without lesson plan or answer key for easy upload to a learning management system or printing for classwork.

<https://ffa.box.com/s/zd3fj86monu29c5fafne2k5it1kt9qe7> (Word)

<https://ffa.box.com/s/h3123wslux4ngapykmaluxe3okvdp4g9> (PDF)

https://docs.google.com/document/d/1_qHwiih3bKj_TNxsfrJ4wghaJrKbpCziOI0jCK0R5EM/copy (Google)

LESSON PLAN:

1. **Bell Ringer:** Name a unique flavor of ice cream or frozen custard that you have tried. What made it stand out to you?
2. **Introduction:** *As we just talked about, there are a lot of unique flavors of desserts out there! Have you ever thought about how people come up with those flavors? Food companies, like Culver's, have teams of food scientists, culinary experts and ingredient connoisseurs whose whole job is to come up with new food items and flavors that will taste good and perform well with customers.*

Play the Product Development and Quality Assurance segment from the [Culver's Virtual Field Trip on AgExplorer](#). Have students complete the questions on the Product Development and Quality Assurance section of the Culver's Virtual Field Trip Student Guide.

3. **Activity:** Each student needs a copy of the "Custard Creation Challenge" worksheet. Introduce students to Culver's Frozen Custard Flavor of the Day by playing them the "Flavor of the Day" video (<https://www.youtube.com/watch?v=fS3qgWx44CM>). Divide students into teams of three or four, depending on your class size and needs. Explain to them that Culver's is challenging their teams to come up with the next set of flavors of the day for the menu and they will each be getting a scenario to guide the development of a new flavor.
 - a. **Part 1:** Hand out one scenario to each team. Teams will read their scenarios and spend time brainstorming different ideas for a new flavor to meet the needs of that scenario. They should brainstorm flavor names, custard bases, mix-ins/toppings, how they want it to taste, etc. They will use these notes and ideas as they move into Part 2.
 - b. **Part 2:** Teams will take their brainstorming from Part 1 and choose one idea to make into their new flavor. They will need to name their flavor, write an enticing description, list ingredients/mix-ins and draw what their flavor is going to look like.
 - c. **Part 3:** Once teams have their flavor created, they will then plan their pitch to deliver to the rest of the class. They will follow along with the prompts to identify their target audience, explain how their new flavor meets the needs of their scenario and begin to plan out their pitch to deliver to the rest of the class. Each pitch should be two to three minutes.
 - d. **Part 4:** Teams will take turns presenting their flavors to the class. As each pitch is delivered, students will evaluate it according to the provided short rubrics and ultimately make recommendations about whether Culver's should include each flavor in their "Flavor of the Day" rotations. Students will then answer reflection questions after the activity.
4. **Follow-up:** Have students answer the reflection questions at the end of the student worksheet and hold a short class discussion using the questions as a guide.
5. **Optional – Extended Learning Opportunities (Not factored into time requirement):** Have students bring in the ingredients for their frozen custard flavor and try making it. You can use the recipe found in the "[What's the Scoop](#)" lesson as the frozen custard base. Hold a taste test for the entire class and vote on the best flavor. (This could be combined with Part 4 of the activity.)
6. **Exit Ticket:** What was the most important factor you considered when creating your new flavor? Why was that factor so important?

Name: _____

Aligned to the following standards: AG5; AG-FD2;
CS.05; FPP.02; FFA.PL-A; FFA.CS-M; FFA.CS-N;
CCSS.ELA.SL.9-10.1.B; CCSS.ELA.SL.9-10.1.C;
CCSS.ELA.SL.9-10.1.D; CCSS.W.9-10.4; CRP.04; CRP.06

Custard Creation Challenge

Team Name: _____

Team Members: _____

PART 1

Directions: Culver's is looking to expand their "Flavor of the Day" list, and your team has been asked to develop a new frozen custard flavor for the list. Read the scenario assigned to your team and brainstorm ideas for your new frozen custard flavor using the space provided below. Consider the following items in your brainstorming: custard base flavor (vanilla, chocolate, etc.), mix-in ingredients, flavor name, taste and texture notes. You'll use these ideas as you move forward in your flavor development. To view current flavors, visit: <https://culvers.com/flavor-of-the-day>.



Name: _____

PART 2

Directions: Now, it's time to narrow your brainstorming down and create a single flavor that meets the criteria of your assigned scenario. Work as a team to answer the questions below to plan your flavor.

Flavor Name: (Come up with something catchy and relevant to the theme your team has been assigned.)

Flavor Description: (Write a delicious summary of your flavor that fits with your theme and entices Culver's customers to try your creation.)

Frozen Custard Base (check one): ☐ Vanilla ☐ Chocolate ☐ Other: _____

List of Ingredients: (Include all mix-ins and toppings for your flavor.)

Drawing of Your Flavor: (Sketch a drawing of what your flavor would look like in the space below.)

Name: _____

PART 3

Directions: Use the prompts below to develop a pitch for your flavor. Your group will present your two- to three-minute pitch to the class. Your classmates will evaluate your flavor and decide whether Culver’s should add it to their “Flavor of the Day” list.

Copy your flavor name and description below:

Flavor Name: _____

Flavor Description: _____

Target Audience:

Who would enjoy this flavor most? _____

Why will they love it? _____

Theme Integration: (Explain in four or five sentences how your new frozen custard flavor fits your assigned scenario.)

Complete Your Pitch: (Why is your flavor unique? Why should Culver’s add it to the menu?)

Name: _____

PART 4

Directions: As you listen to your classmate’s pitches, evaluate them using the tables below.

Group Name:														
Flavor Name:														
Originality					Appeal of Flavor					Theme Integration				
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Target Audience					Overall Pitch					Recommend for Culver’s Menu?				
1	2	3	4	5	1	2	3	4	5	Yes		No		
Additional Comments:														

Group Name:														
Flavor Name:														
Originality					Appeal of Flavor					Theme Integration				
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Target Audience					Overall Pitch					Recommend for Culver’s Menu?				
1	2	3	4	5	1	2	3	4	5	Yes		No		
Additional Comments:														

Group Name:														
Flavor Name:														
Originality					Appeal of Flavor					Theme Integration				
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Target Audience					Overall Pitch					Recommend for Culver’s Menu?				
1	2	3	4	5	1	2	3	4	5	Yes		No		
Additional Comments:														

Group Name:														
Flavor Name:														
Originality					Appeal of Flavor					Theme Integration				
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Target Audience					Overall Pitch					Recommend for Culver’s Menu?				
1	2	3	4	5	1	2	3	4	5	Yes		No		
Additional Comments:														

Name: _____

Group Name:														
Flavor Name:														
Originality:					Appeal of Flavor:					Theme Integration				
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Target Audience:					Overall Pitch:					Recommend for Culver's Menu?				
1	2	3	4	5	1	2	3	4	5	Yes		No		
Additional Comments:														

Group Name:														
Flavor Name:														
Originality					Appeal of Flavor					Theme Integration				
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Target Audience					Overall Pitch					Recommend for Culver's Menu?				
1	2	3	4	5	1	2	3	4	5	Yes		No		
Additional Comments:														

Group Name:														
Flavor Name:														
Originality					Appeal of Flavor					Theme Integration				
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Target Audience					Overall Pitch					Recommend for Culver's Menu?				
1	2	3	4	5	1	2	3	4	5	Yes		No		
Additional Comments:														

Group Name:														
Flavor Name:														
Originality					Appeal of Flavor					Theme Integration				
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Target Audience					Overall Pitch					Recommend for Culver's Menu?				
1	2	3	4	5	1	2	3	4	5	Yes		No		
Additional Comments:														

Name: _____

Group Name:														
Flavor Name:														
Originality					Appeal of Flavor					Theme Integration				
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Target Audience					Overall Pitch					Recommend for Culver's Menu?				
1	2	3	4	5	1	2	3	4	5	Yes		No		
Additional Comments:														

Group Name:														
Flavor Name:														
Originality					Appeal of Flavor					Theme Integration				
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Target Audience					Overall Pitch					Recommend for Culver's Menu?				
1	2	3	4	5	1	2	3	4	5	Yes		No		
Additional Comments:														

Reflection Questions:

1. What was the most important factor you considered when creating your new flavor? Why was that factor so important?
2. What was the most challenging part of coming up with your flavor?
3. How did your team balance creativity with practicality during this activity?
4. If you could revisit your team's flavor concept, what would you change and why?
5. What was your favorite flavor you heard from your classmates today? Why?
6. What are three careers that would be involved in the creation of new food products? (Use [AqExplorer.FFA.org/focus/food-products-processing-systems/](https://www.aqexplorer.org/focus/food-products-processing-systems/) if you need help with career titles.)
 - a.
 - b.
 - c.
7. What two skills or abilities would one need in order to have a career helping to develop new food products?
 - a.
 - b.

Name: _____

Appendix 1: Frozen Custard Creation Scenarios

Directions: Cut the following scenarios apart and give one to each team. Teams must use this scenario when designing their flavor for the challenge.

Scenario 1: Seasonal Sensations

Your team must create a frozen custard flavor inspired by a specific season (e.g., winter, summer). This flavor should include seasonal ingredients and will be rotated through the flavor of the day menu during that season.

Scenario 2: Regional Favorite

Design a flavor that represents your state or region, incorporating local ingredients or cultural elements that are easily recognizable to and beloved by local Culver's guests.

Scenario 3: Movie Night Madness

Create a flavor inspired by a night at the movies using ingredients that remind Culver's guests of sitting in a dark theater enjoying their favorite film.

Scenario 4: International Flavors

Develop a frozen custard inspired by another country's cuisine or traditional dessert. Think about the kinds of ingredients, flavors and mix-ins used in that country and try to keep it as authentic as possible to that culture.

Scenario 5: Healthy Indulgence

Many Culver's guests are becoming more and more health conscious. Create a new flavor that feels and tastes indulgent while also using natural or low-calorie ingredients they will love.

Scenario 6: Allergen-Friendly

Culver's is looking to be more inclusive of all health needs. Your challenge is to create a delicious flavor that avoids common allergens such as nuts, gluten, etc.

Scenario 7: Celebrity Collab

Imagine a celebrity has partnered with Culver's. Design a new flavor based on their personality or favorite foods.

Scenario 8: Breakfast Delight

Develop a new custard flavor that fits right alongside classic breakfast items and flavors and would be appealing to eat in the morning.

Scenario 9: Surprise Inside

Culver's wants to launch a line of custard flavors with hidden surprises, such as layers or mix-ins that reveal themselves as guests eat.

Scenario 10: Kids' Choice

Culver's wants to create a flavor designed specifically for kids (although adults may enjoy it as well). Think about fun, colorful and playful ingredients that will make any guest feel like a kid again.