

#### Formula Worksheet #1



### Vienna Bread Dough

Yield: 1453 g

	Ingredient Name		Weights and Meas					
			Ounces	Bakers	Kilos	Grams		
		LB	OZ	%	Kilos	Grains		
1	Water (temperature controlled)	1		53		454		
2	Eggs, Whole		2.00	6		57		
3	Fat, All Purpose Shortening		1.00	3		28		
4	Salt		0.50	1.6		14		
5	Sugar, Granulated		1.00	3.3		28		
6	Flour, Bread	1	14.00	100		850		
7	Yeast, Active Dry		0.75	2.5		22		
8								
9								
15								
	Total Formula Weight	3	3	169.4		1453		

#### Method: Please follow the 12 Steps of Yeast Dough Production

# PREPARE TWO (2) SETUP'S

YOU WILL BE MAKING TWO (2) BREAD DOUGHS

Off camera (earlier in the day, or the day before) you will prepare one of the prepped batches of the bread dough. Letting it bulk rest until needed.

You will then be mixing the second dough on camera, demonstrating all the steps needed to properly develop the dough. Showing the mise-en-place, dough calculations, finished texture, windowpane, and temperature.

Then you will swap out properly fermented dough, (the dough made earlier) demonstrating shaping techniques, bringing it to proof and baking stages on-camera.

During the proofing and baking process you could be working on other tasks.

1a. Clean work area and wash hands.

Prepare your mise-en-place, by assembling your equipment and supplies.

All ingredients may be pre-scaled, but not combined.

As described in the guide please label and identify all ingredients.

#### 1b. Scaling Mise-en-place

After scaling all the ingredients. Perform the necessary temperature calculations.

#### 2. Mixing

Into the mixing bowl place the scaled water, eggs, fat, salt and sugar.

Mix on low speed until well incorporated.

Then add half of the flour. Mix just to incorporate.

Then combine the yeast with the rest of the flour and add to the mixer.

Mix on medium speed for approximately 6 minutes, until the dough temperature reaches 77°, and is developed.

#### 3. Fermentation

Place the dough into an oiled/sprayed large S/S bowl or bus tub.

Cover the dough with a couche, cloth or bus tub lid.

Allow the dough to ferment until doubled. Between 20 and 40 minutes.

#### 4. Punching

Punch the dough down. Recover with couche or cloth and allow to rest 10 minutes, before scaling.

#### 5. Scaling/Dividing

Scale the dough as needed. See requirements.

#### 6. Rounding

Round up and or pre shape your scaled pieces.

#### 7. Bench Resting

Cover again and allow to rest until the gluten is relaxed, about 10 minutes.

#### 8. Makeup/Shaping and Panning

Create the following items.

Three Braid Loaf, 1 loaf at 510 g (18 oz).

Baguette, 2 pieces at 240 g (8 oz).

Pain d'epi, 1 piece at 450 g (16 oz).

Brush the pieces with water.

Pan appropriately.

#### 9. Proofing

Cover the shaped and panned pieces with a couche or cloth.

Proof the shaped pieces until doubled in size.

About 40 minutes.

#### 10. Baking

Bake at 350° until firm and brown.

For Loaves about 25 to 30 minutes. REMEMBER TIME IS APPROXIMATE.

For rolls about 12 to 15 minutes. REMEMBER TIME IS APPROXIMATE.

#### 11. Cooling

Allow the product to cool. Remove loaves from pans.

#### 12. Storing

#### Display all products.

13. When baked display all the items on a paper lined sheet pan.

Place each item on a scale so weights can be taken.

Place a ruler next to all the items so measuremnets can be taken.

After that is done. Slice the braided loaf at an angle so that the interior can be viewed.

Slice the Baugette and Pain d'epi horizontally so the interior can be viewed.

Additional Directions
* Before recording please try to have one of the cameras time/date stamp turned on!
1. While video recording please show the students mise-en-place of prepped and
pre-measured ingredients.
2. Please show the stages the addition of the ingredients and mixing process.
Take a picture of the students temperature calculations.
3. During the mixing process please show a closeup of the dough being mixed.
Capture the student checking the dough consistency with a closeup shot of the "window pane" test.
Also show the final dough temperature.
Show the student preparing the dough to be fermented.
4. At this point the student will swap this freshly mixed dough with the the first dough made.
Please show the scaling of the pieces, shaping of the pieces, and final panning.
Show closeups of the dough after proofing.
5. Please show the student preparing the dough to be placed in the oven.
This should include scoring the Baguette and cutting the Pain d'epi, and any other final details they do.
6. Show the student placing the items in the oven and removing them when baked.
7. The student will display all the bread items, on a paper lined sheet pan.
Please show closeups of the students final work. Making sure to capture the ruler and
food items. Please show a closeup of the bread on a scale capturing the weight of each item.
Then please show a closeup of the three types of bread which have been cut.
We need to see the structure of the crumb on the breads.
Then take one of the loaves and crush it slightly to show "bounce back" and moistness.
Then with your fingers pinch a piece of the dough and pull it out of the bread. Show the piece of bread.
Calculation
DDT * 3 = (A)
FT+RT+MF= (B)
A - B = WT

#### Bread Pictures (Representation Only)













#### **Tools/Equipment:**

- \*Card Scraper
- \*Couche/Cloth
- \*Dough Cutter/Bench Knife
- \*Ingredient Containers for scaling
- \*Lame/Bread Knife
- \*S/S Bowl/Bus or Tub w/lid
- \*Scale
- \*Silpat (Full Sheet)
- \*Thermometer (digital prefered)
- \*Zester
- \*Dough Hook
- \*Mixer (Kitchen Aid)
- \*Mixing Bowl
- \*Pan Liner
- \*Pan Spray
- \*Sheet Pan
- \*=Items Supplied by Contestant







# SkillsUSA Commercial Baking 2021 Source: Chef Chris Teixeira CMB

# Formula Worksheet #2



# Pâte à Choux

**Yield: 1191g** 

	Ingredient Name		Weights and Measures						
			Ounces OZ	Bakers %	Kilos	Grams			
1	Water		6.95	100		197			
2	Milk		6.95	100		197			
3	Sugar, Granulated		0.17	3		5			
4	Salt		0.17	3		5			
5	Dairy, Butter Sweet Unsalted		6.95	100		197			
6	Flour, All Purpose		6.95	100		197			
7	Eggs, Whole		13.86	200		393			
8									
	Total Formula Weight	2	10	606		1191			

#### Method:

1. Clean work area and wash hands.

Prepare your mise-en-place, by assembling your equipment and supplies.

All ingredients may be pre-scaled, but not combined.

As described in the guide please label and identify all ingredients.

- 2. Combine the water, milk, sugar, salt and butter in a sauce pot and bring to a boil.
- 3. Add the flour and cook for several minutes or until the mixture appears drier and begins to stick to the bottom of the pot.
- 4. Remove from the heat and place in a mixing bowl with a paddle.
- \*\*This dough may also be mixed by hand, using a rubber spatula in a stainless mixing bowl.
- 5. Mix the panade slightly to cool, making sure the mixture is still warm, slowly start to add the eggs in stages. Scrape the bowl between each addition.

Continue adding the eggs in stages the eggs and mix until the desired consistency is reached.

6. Using an Ateco 807 or comparable tip, pipe the mixture onto a paper lined sheet pan.

USE ONE PAN FOR THE CREAM PUFFS AND ANOTHER FOR THE ECLAIRS.

For the Eclair pipe four (4") inches long. Bag at least 12 eclairs.

For the Cream Puff pipe a two (2") inch diameter ball. Bag at least 12 cream puffs.

7. Bake at 400 to 425° in a deck oven for approximately 20 minutes.

Rotate the pan and continue to bake until the puff and eclair are dried out.

8. When baked display all the of the items produced.

Onto a parchment lined full sheetpan...

Place all but 2 of the Cream Puffs on the left side of the sheetpan.

With half of them displayed with the bottom side up.

Place all but 2 of the Eclairs on the right side.

With half of them displayed with the bottom side up.

(SEE PICTURE BELOW).

Place a ruler next to each side of the items as well.

Take 2 Cream Puffs and 2 Eclairs and split in 1/2 horizontally.

Display them on an 8" white plate so that the interior of the products are showing.

#### \* Before recording please try to have one of the cameras time/date stamp turned on!

- 1. While video recording please show the students mise-en-place of prepped and pre-measured ingredients.
- 2. Please show the stages of the mixing process and the addition of the ingredients.
- 3. During the cooking process please show a closeup of the mixture cooking in the sauce pan/pot. Capture the melting of the fat and the addition of the flour with a closeup and then again a closeup of the final cooking stage.

After the Pâte à Choux has been removed from the sauce pan/pot please show the interior of the container to evaluate the residue in the bottom.

4. Please show a closeup of the mixture.

Have the student take a spoon/spatula and gather up some of the panade.

Hold the spoon up on its side so the consistency can be evaluated.

5. Please show the mixing process on the mixer. Specifically the addition of the eggs, and scraping of the bowl.

Again have the student take a spoon/spatula and gather up some of the dough.

Hold the spoon up on its side so the consistency can be evaluated.

Also have the student drag a finger through the mixture in the mixing bowl.

6. Show the process of the student bagging the products onto the sheet pan. Placing them in the oven and removing them once baked.

7. Please show closeups of the students final work. Making sure to capture the ruler and food items.

Also try to capture the interior of the products on the plate.

#### Choux Items (Representation Only)











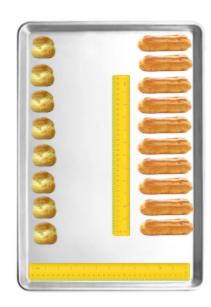






#### **Tools/Equipment**

- \*Bowl Scraper
- \*Ingredient containers for scaling
- \*Pastry Bag
- \*Pastry Tip (Ateco 807 (.56")) or similar size (Round)
- \*Rubber Spatula Heat proof
- \*Scale
- \*Mixer (Kitchen Aid Style)
- \*Mixing Bowl
- \*Pan Liner
- \*Sheet Pan
- \*=Items Supplied by Contestant



In the above image place 1/2 of each product upside down so the baked bottom is visible



# SkillsUSA Commercial Baking 2021 Source: Chef Chris Teixeira CMB



#### Formula Worksheet #3

# **Chocolate Chip Cookie**

# **Yield: 18 Cookies**

		Weights and Measures						
	Ingredient Name	Pounds	Ounces	Bakers	Kilos	Grams		
		LB	OZ	%	Kilos	Grains		
1	Dairy, Butter Sweet Unsalted, Diced		8.71	71.20		247		
2	Sugar, Brown		5.53	45.40		157		
3	Sugar, Granulated		5.86	48.00		166		
4	Eggs, Whole (Room Temperature)		3.46	28.30		98		
5	Extract, Vanilla		0.18	1.30		5		
6	Flour, Bread		6.10	50.00		173		
7	Flour, All Purpose		6.10	50.00		173		
8	Salt		0.25	2.02		7		
9	Baking Soda		0.18	1.30		5		
10	Chocolate Chips or Chunks		12.24	100.10		347		
15								
-	Total Formula Weight	3	0.04	397.62		1378		

#### Method:

1. Clean work area and wash hands.

Prepare your mise-en-place, by assembling your equipment and supplies.

All ingredients may be pre-scaled, but not combined.

As described in the guide please label and identify all ingredients.

2. In a mixing bowl with a paddle, cream the butter and sugars until combined and light in color.

Please stop the mixer a few times to show the evaluators the creaming consistency of the dough.

3. Gradually add the eggs and vanilla in stages and scrape after each addition.

Again stop the mixer and show the evaluator the consistency.

- 4. Combine the dry ingredients, add to the mixing bowl all at once, and mix until just combined.
- 5. DO NOT OVER MIX!
- 6. Add the chococlate pieces and mix until combined.
- 7. Scoop the dough with a 2 oz (#16) scoop. Place the cookies close together on a lined sheet pan. Refrigerate the cookies.
- 8. After chilling the cookie dough, remove from the refrigerator then pan on a lined sheet pan 3 x 4.
- 9. In a convection oven bake at 325° F for 12 to 14 minutes until done.

The outside should be golden brown and the center should be slightly pale.

10. When baked display all the cookies produced.

Please take 4 cookies and place on a scale to measure an average weight in grams.

After weighing place the cookie on a sheet pan with a ruler so we can see the measurements.

Then please choose 2 cookies and break in half. Display on an 8" white plate

with a ruler to gague its size.

Display the remaining cookies on a 1/2 sheet pan with parchment underliner.

Place 1/2 of the cookies face side up, and the other 1/2 face side down.

#### \* Before recording please try to have one of the cameras time/date stamp turned on!

- 1. While video recording please show the students mise-en-place of prepped and pre-measured ingredients.
- 2. Please show the stages of the mixing process and the addition of the ingredients. Evaluators need to see the creaming consistency of the dough.
- 3. Please show the student placing them in the oven and removing them. Also show the de-panning process.
- 4. Please show a closeup of the 4 cookies on a scale capturing the weight.

After weighing place the cookie on a sheet pan with a ruler so we can see the measurements.

Then please show a closeup of the 2 cookies on a plate that have been broken in half.

We need to see the structure of the crumb on the cookie.

Then in a closeup take one of the cookies and with your thumb press the center,

we need to check for moistness and correct baking.

Also do a closeup of the trayed cookies to check for correct doneness, with 1/2 of them being displayed upside down.

Chocolate Chip Cookies (Representation Only)





#### **Tools/Equipment**

- \*Bowl Scraper
- \*Ingredient Containers for scaling
- \*Rubber Spatula
- \*Scale
- \*Scoop #16
- \*Convection Oven
- \*Mixer (Kitchen Aid Style)
- \*Mixing Bowl
- \*Pan Liner
- \*Sheet Pan(s)
- \*Gloves
- \*=Items Supplied by Contestant













#### Formula Worksheet #4A



# Yield: 1 Decorated Cake

# **Cake Decorating**

			Weights and Measures					
	Ingredient Name	Pounds LB	Ounces OZ	Bakers %	Kilos	Grams		
1	Cake Layers (White) (8") 2 each							
2	Filling, Red Jelly or Jam (AN)							
3	Icing, Butter Cream (Your choice)	1	8.00			681		
4	Cake Board (1 each)							
5	Food Colors (AN)							
6								
	Total Formula Weight							

#### Method:

1. Clean work area and wash hands.

Prepare your mise-en-place, by assembling your equipment and supplies.

All cake layers should be of a white or yellow cake (no chocolate) and 1 1/2" thickness.

Icing should be of a "Buttercream" variety. Fresh made or pre purchased is okay.

All colors and pastry bags and tips may be prepared in advance.

As described in the guide please label and identify all ingredients.

- 2. Decorate and display the cake as instructed by the cake order form.
- 3. Write your conestant number on the side of the cake and display.

Please cut an approximate 1/6th portion of the cake and display on an 8" WHITE plate for evaluation.

Place a ruler against the side of the cake.

#### **Additional Directions**

#### \* Before recording please try to have one of the cameras time/date stamp turned on!

1. While video recording please display close-ups of the decorating process.

Including splitting the cake layers, filling the layers, and icing the exterior.

Please show the top of the cake being decorated and the flowers being made.

- 2. After finishing please show a close up of the top and sides of the decorated cake, while on a turntable. Rotate the turntable slowly so that the all areas of the cake can be viewed.
- 3. Hold up a ruler against the cake and zoom so that the evaluator can see the sizes of the cake layers and icing thickness. Leaving the cake on the turntable please show a closeup of the interior cut portion of the cake. Replace the cake on the turntable with the cake slice and again rotate the turntable for a full view of the cake slice.

#### Decorated Cake (Representation Only)



#### Tools/Equipment

- \*Bowl Stainless (1, 2, 3, and 4qt)
- \*Card Scraper/Bowl Scraper
- \*Flower Nails
- \*Knife, Serrated
- \*Pastry Bags
- \*Pastry Tips
- \*Spatula, Assorted
- \*Spatula, Rubber
- \*Cake Board
- \*Cake Turntable

#### \*=Items Supplied by Contestant







# 2021 - Bakery Order Form

**Customer Name:** Mrs. Jane Smith

**Day Wanted:** Friday

**Phone:** 555-987-6543

Date Wanted: June 11, 2021

Time Wanted: 3:30 PM

**Cake Size: 8" Round White Cake** 

**Cake Filling: Red Jelly or Jam** 

Icing: Cake Iced in Buttercream Icing, All borders and decorations in Buttercream Icing, Customer does

not want the sides combed.

**Colors:** Yellow Roses, Green Leaves

Flower Type: Spray of Roses (3 to 5)

**Inscription:** Congratulations SkillsUSA

#### **Special Instructions:**

- 1. Split each cake layer horizontally. Fill with the red jelly or jam. Stack the cakes together so that the cake is 4 layers tall, and that there are three layers of filling.
- 2. | Scale no more than 2 lbs of Buttercream Icing. Use whipped topping to ice the cake.
- 3. Prepare your colors as described above for the borders, roses, leaves and inscription using the Butter Cream icing provided.
- 4. Pipe a white border. One shell style, and one of your own choosing.
- 5. Do not comb the sides.
- 6. Customer would like your contestant number on the back side of your cake written in icing.

# Sample of how 4 layers are to be stacked. This is just an example!







#### Formula Worksheet #5

## Jalapeño Cheddar and Pepper Corn Muffin

Yield: 1lbs 9oz ≅, 702.5g ≅

	Weights and Measures						
	Ingredient Name	Pounds LB	Ounces OZ	Bakers %	Kilos	Grams	
1	Flour, All Purpose		3.17	50		90	
2	Yellow Cornmeal		3.17	50		90	
3	Sugar, Granulated		0.75	12.5		21	
4	Salt		0.05	0.9		1.5	
5	Baking Powder		0.10	1.6		3	
6	Baking Soda		0.04	0.6		1	
6	Eggs, Whole (1 each)		2.50	42		71	
7	Buttermilk		6.00	100		170	
8	Oil, Vegetable		2.00	33		57	
9	Jalapeño and Pepper Mixture		5.5 ≅	92		155 ≅	
10	Cheese, Cheddar Shredded		1.50	25		43	
11							
	Total Formula Weight	1	8.78	407.6		702.5 ≅	

#### Method:

1. Clean work area and wash hands.

Prepare your mise-en-place, by assembling your equipment and supplies.

All ingredients may be pre-scaled, but not combined.

As described in the guide please label and identify all ingredients.

2. Into a 4 qt Stainless Bowl, scale and stir together well the Flour, Corn Meal, Sugar,

Salt, Baking Powder and Baking Soda.

- 3. Into a 2 qt Stainless Bowl, scale and stir together well the Eggs, Buttermilk and Oil.
- 4. Into the 4 qt bowl add the liquid ingredients to the dry ingredients using the muffin mixing method.
- 5. Gently fold in the Pepper mixture and Cheese.
- 6. Using a #16 scoop portion the batter into WELL GREASED muffin pans.

The pan must be well greased because you are not using a paper liner.

You should have between 10 and 12 muffins.

7. Bake at 375° F in a deck oven until the center of the muffins bounce back when lightly pressed, approximately 20-25 minutes.

Let cool for 4 to 5 minutes and then remove from the pan for cooling.

8. When baked display all the muffins produced.

Please take 4 muffins and place on a scale to measure an average weight.

After weighing please choose 2 muffins and cut each in half. Display on an 8" white plate with a ruler to gague its size.

Display the remaining muffins on a 1/2 sheet pan with parchment underliner.

#### \* Before recording please try to have one of the cameras time/date stamp turned on!

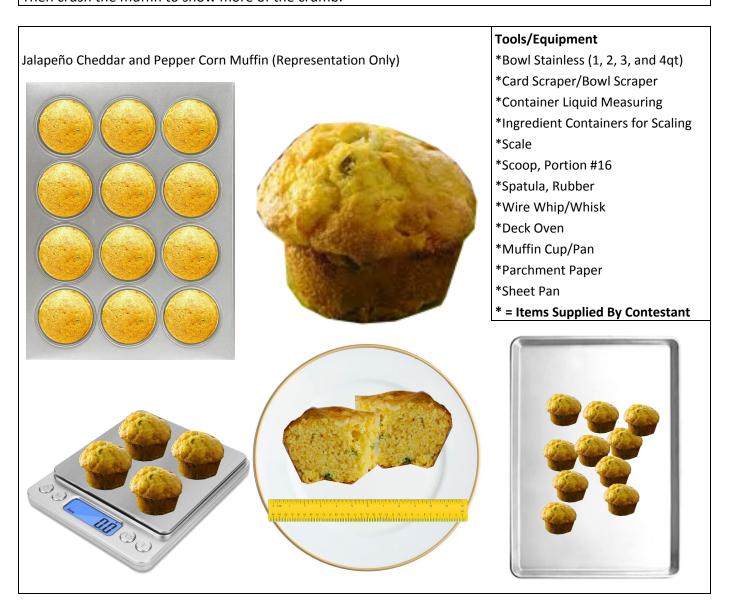
- 1. While video recording please show the students mise-en-place of prepped and pre-measured ingredients.
- 2. Please show the stages of the mixing process and the addition of the ingredients.
- 3. Please show the student placing them in the oven and removing them. Also show the de-panning process.
- 4. Please show a closeup of the 4 muffins on a scale capturing the weight.

Then please show a closeup of the 2 muffins on a plate that have been cut in half.

We need to see the structure of the crumb on the muffins.

Then take one of the muffins and crush it slightly to show "bounce back" and moistness.

Then crush the muffin to show more of the crumb.









# **Pepper Mixture**

Yield: ≅13oz, ≅369g

	Ingredient Name		Weights and Measures								
			Ounces OZ	Bakers %	Kilos	Grams					
1	Oil (1 T)		0.50			15					
2	Bell Pepper, Red (1 each)		6 ≅			170 ≅					
3	Jalapeño (2 each)		2 ≅			50 ≅					
4	Onion, Red Small (1 each)		4 ≅			125 ≅					
5	Garlic, Minced (2 tsp) ( ≅ 2 cloves)		.25 ≅			5 ≅					
6	Salt (1/4 tsp)		.125 ≅			2 ≅					
7	Pepper (1/4 tsp)		.125 ≅			2 ≅					
8											
	Total Formula Weight		13 ≅			369 ≅					

#### Method:

1. Clean work area and wash hands.

Prepare your mise-en-place, by assembling your equipment and supplies.

All items may be pre measured.

The onion and the garlic can be pre cleaned/peeled.

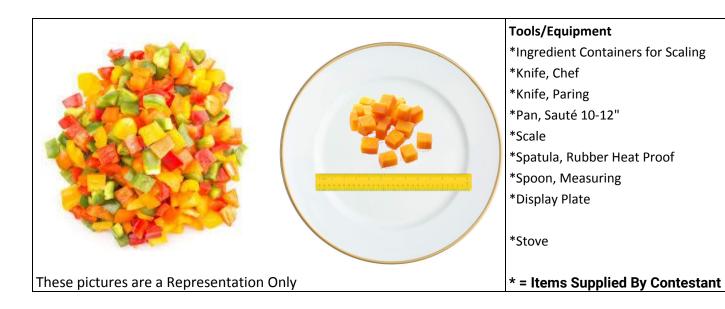
- 2. Small dice the Bell Pepper, Jalapeño and Red Onion (Small dice is ¼" x ¼" x ¼"). Mince the garlic.
- 3. Place approximately 60g / 2 ozs of your combined knife cuts on an 8"white plate.
- 4. Into a sauté pan heat the oil over medium heat.
- 5. Add all the ingredients. Cook and stir the mixture until the onion is translucent and the peppers are cooked through. Re-adjust the seasonings as needed. Sauté for approximately 7 to 10 minutes.
- 6. Remove the mixture form the heat and cool before using.

#### **Additional Directions**

- \* Before recording please try to have one of the cameras time/date stamp turned on!
- 1. While video recording please show the students mise-en-place of prepped and pre-measured ingredients. Also please show a close-up of the knife cut process.
- 2. After finishing the knife cuts display approximately 60g / 2 oz on an 8" white plate.

Spread out the cuts so they are not in a pile. Place a ruler next to the cuts for size evaluation.

- 3. During the sauté process please show a closeup of the items cooking in the sauté pan.
- 4. Prior to cooking display some of the mixture spreadout on an 8" plate with a ruler to judge sizes. After cooking spread the sauté vegetables onto an 8" white plate with a ruler for evaluation. Please show a closeup of the cooked mixture.









Yield: 1lb 9.5oz, 723g

# Crème Pâtissière

		Weights and Measures					
	Ingredient Name	Pounds LB	Ounces OZ	Bakers %	Kilos	Grams	
1	Dairy, Milk Whole	1	0.00			454	
2	Sugar, Granulated (First Half)		2.00			57	
3	Egg, Yolks (Large) (1.25 oz or 35.5g = 2 yolks)		1.25			35	
4	Egg, Whole (Large) (1.75 oz or 50g = 1 Whole Egg)		1.75			50	
5	Corn Starch		1.25			35	
6	Sugar, Granulated (Second Half)		2.00			57	
7	Dairy, Butter Sweet Unsalted		1.00			28	
8	Flavor, Extract Vanilla		0.25			7	
9							
	Total Formula Weight	1	9.5			723	

#### Method:

1. Clean work area and wash hands.

Prepare your mise-en-place, by assembling your equipment and supplies.

All ingredients may be pre-scaled, but not combined.

As described in the guide please label and identify all ingredients.

2. In a stainless steel bowl, with a wire whip beat the egg yolks and whole eggs.

Sift the cornstarch and half of the first half of the sugar into the bowl with the eggs.

Using the whip mix until lemony yellow.

- 3. In a heavy stainless steel saucepan/pot, dissolve the the other half of the sugar with the milk, and bring just to a boil.
- 4. Temper the egg mixture by slowly beating the hot milk into the eggs mixture.
- 5. Return the mixture back to the heat and bring back to a boil. Using a rubber spatula stir constantly.
- 6. When the mixture comes to a boil and thickens, remove from the heat.
- 7. Add the butter and vanilla and mix well.
- 8. Pour the hot Crème Pâtissière onto a clean sanitized plastic lined 1/2 sheet pan.

Spread the mixture out to a 1/2" layer.

Cover the top with plastic wrap, making sure that the wrap touches the crème.

Then refrigerate the sheet pan.

- 9. Cool as quickly as possible.
- 10. Use as needed when cool.

#### \* Before recording please try to have one of the cameras time/date stamp turned on!

- 1. While video recording please show the students mise-en-place of prepped and pre-measured ingredients.
- 2. Please show the stages of the mixing process and the addition of the ingredients.
- 3. During the cooking process please show a closeup of the mixture cooking in the sauce pan/pot. Capture the tempering process with a closeup and then again a closeup of the final cooking stage. After the Crème Pâtissière has been removed from the sauce pan/pot please show the interior of the container to evaluate the residue in the bottom.
- 4. Please show a closeup of the after cooking spreading process. Have the student take a spoon and gather up some of the Crème Pâtissière.

Hold the spoon up on its side so the consistency can be evaluated.

After the mixture gets cold repeat the same process to evaluate the setting process.

