M2C3 Project

Pupusa Making Task

Teacher PD Work

This file include four solution path created be teachers as part of their participation in M2C3 professional development workshops.

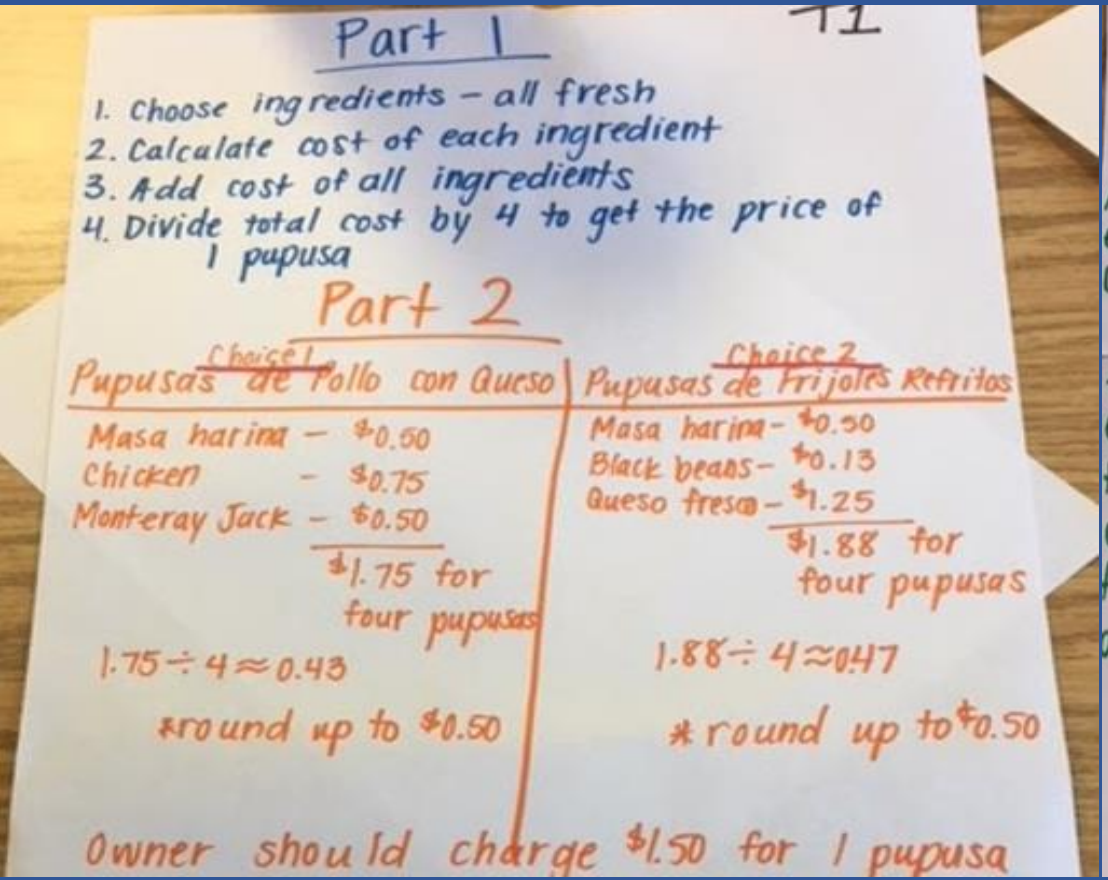
Factors that Teachers Considered

- Cost of ingredients?
- How many pupusas does one recipe make?
- Labor, rent, electricity costs

Connections to Teachers' Experiences

- They have eaten in restaurants and understand that the price of an item reflects more than the cost of ingredients.
- They have followed a recipe and understand that there may be more than one serving per recipe.

Table 1



T1

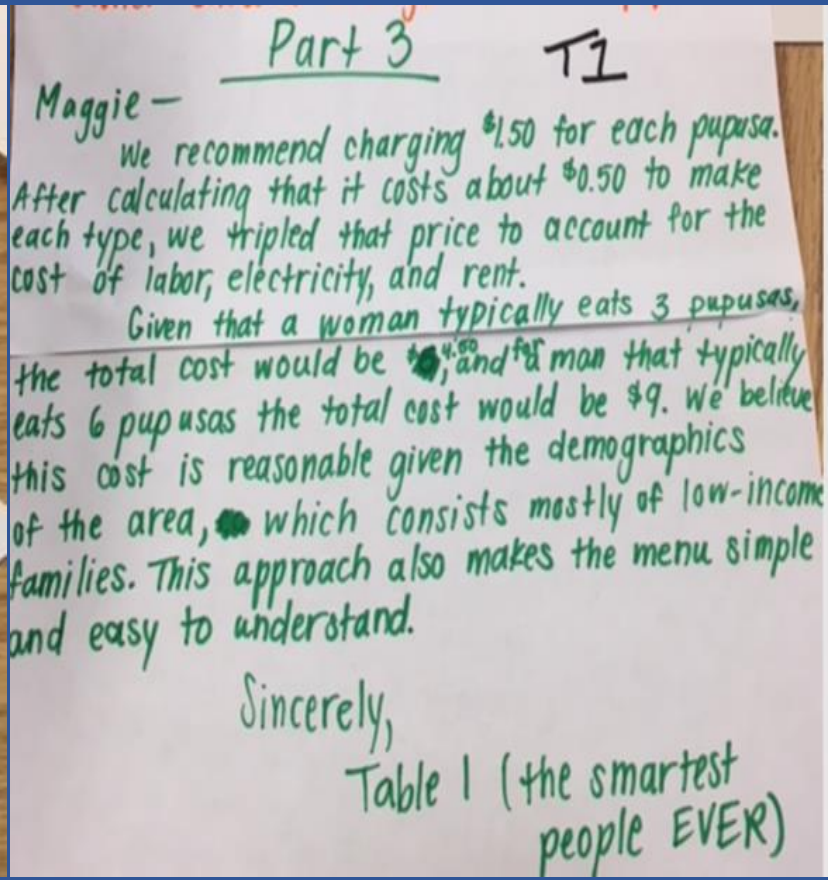
Part 1

1. Choose ingredients – all fresh
2. Calculate cost of each ingredient
3. Add cost of all ingredients
4. Divide total cost by 4 to get the price of 1 pupusa

Part 2

Choice 1 Pupusas de Pollo con Queso		Choice 2 Pupusas de Frijoles Refritos	
Masa harina	$0.50	Masa harina	$0.50
Chicken	$0.75	Black beans	$0.13
Monteray Jack	$0.50	Queso fresco	$1.25
	$1.75 for four pupusas		$1.88 for four pupusas
1.75 ÷ 4 ≈ 0.43		1.88 ÷ 4 ≈ 0.47	
* round up to $0.50		* round up to $0.50	

Owner should charge $1.50 for 1 pupusa



T1

Part 3

Maggie –

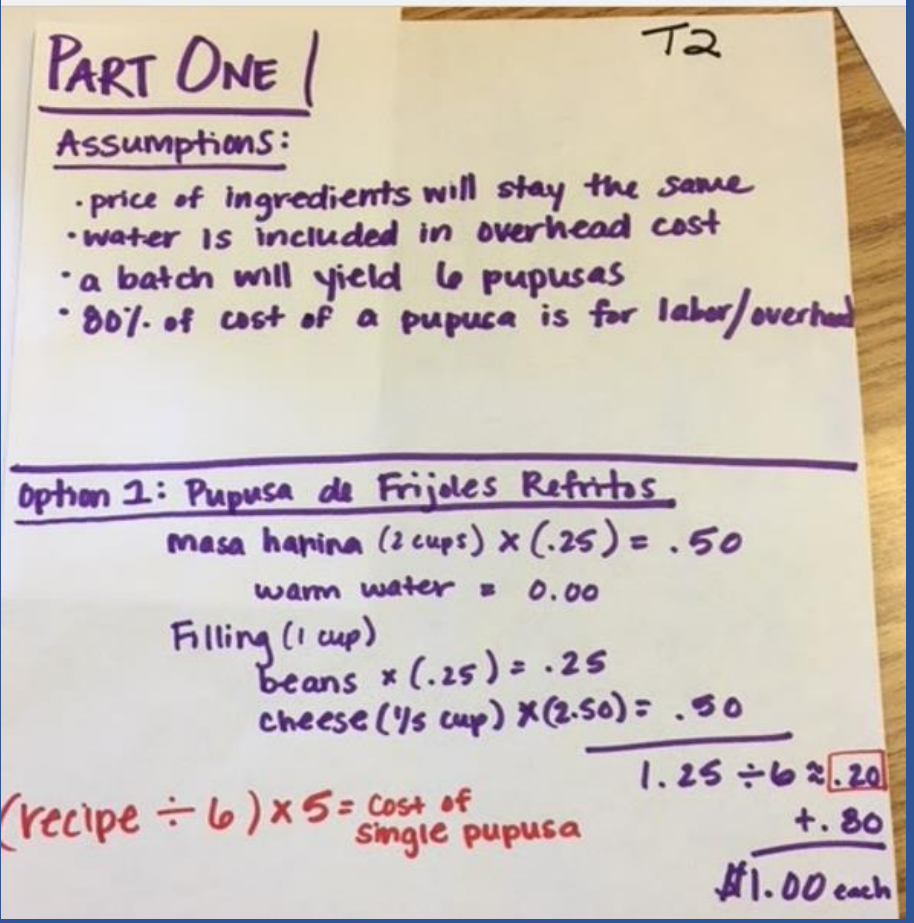
We recommend charging $1.50 for each pupusa. After calculating that it costs about $0.50 to make each type, we tripled that price to account for the cost of labor, electricity, and rent.

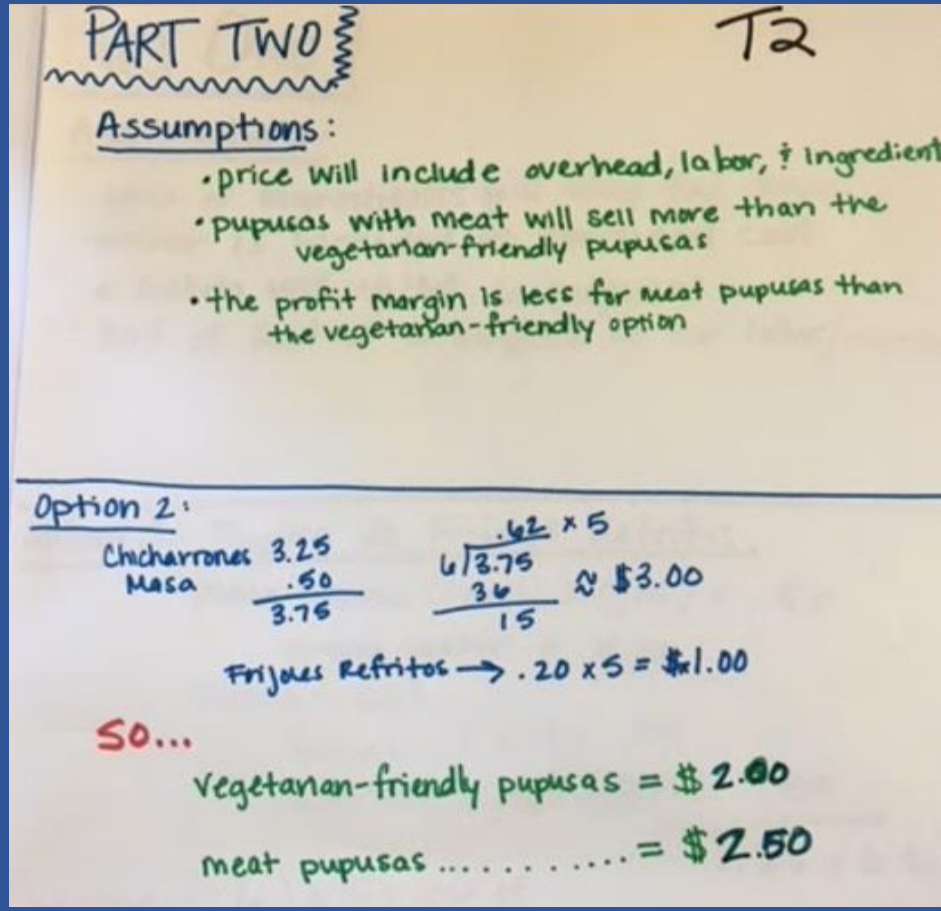
Given that a woman typically eats 3 pupusas, the total cost would be $4.50, and a man that typically eats 6 pupusas the total cost would be $9. We believe this cost is reasonable given the demographics of the area, which consists mostly of low-income families. This approach also makes the menu simple and easy to understand.

Sincerely,

Table 1 (the smartest people EVER)

Table 2


PART ONE
T2
Assumptions:
· price of ingredients will stay the same
· water is included in overhead cost
· a batch will yield 6 pupusas
· 80% of cost of a pupusa is for labor/overhead
Option 1: Pupusa de Frijoles Refritos
masa harina (2 cups) x (.25) = .50
warm water = 0.00
Filling (1 cup)
beans x (.25) = .25
cheese (1/8 cup) x (2.50) = .50
1.25 ÷ 6 ≈ .20
+ .80
$1.00 each
(recipe ÷ 6) x 5 = cost of single pupusa


PART TWO
T2
Assumptions:
· price will include overhead, labor, & ingredient
· pupusas with meat will sell more than the vegetarian-friendly pupusas
· the profit margin is less for meat pupusas than the vegetarian-friendly option
Option 2:
Chicharrones 3.25
Masa .50
3.75
.62 x 5
6|3.75
36
15
≈ $3.00
Frijoles Refritos → .20 x 5 = $1.00
SO...
Vegetarian-friendly pupusas = $2.00
meat pupusas ..... = $2.50

T2

Dear Maggie,

It is our recommendation that your pupusas be sold at the following prices. Those pupusas with meat should cost $3.00 per pupusa. Pupusas without meat, or vegetarian-friendly ones should cost $2.50 per pupusa.

We make this recommendation for a number of reasons. These prices reflect overhead costs, labor costs, as well as the cost of ingredients. Additionally, these prices allow for a profit margin. There is no profit gain on the meat pupusas, however on the vegetarian-friendly pupusas is ~~greater~~ over 100%.

How we came to these prices can be explained through the formula: (Recipe ÷ 6) x 5 = cost of single pupusa.

Can we come to your restaurant for a field trip so our students can experience authentic salvadorian cuisine?

All our best,

Table 2

Table 2 Letter

Table 3

PART ONE

group thinking T3

ASSUMPTIONS:
- Sold single
- going to make pollo y queso fresco
- could make 4, 5, or 6 in a batch
- H_2O is in cost of overhead
- People will buy them
- Combo needs $\frac{1}{2}$ cup of each filling

FACTORS:
- Combination of ingredients
- Cost of each ingredient
- Amount made per batch

MATH:

Masa = $0.25 x 2 [need 2 c for each batch] $0.50

Chicken = $\frac{1}{2}$ x $1.50 [only need $\frac{1}{2}$ c of each for 1 total c of filling] $0.75

Queso fresco = $\frac{1}{2}$ x $2.50 [same as] $1.25

filling = $0.75 + $1.25

Total = $2.50 (1.25 + 0.75 + 0.50)

PRICE IF EACH BATCH MADE...

4 | 5 | 6

$2.50/4 = 0.62 $2.50/5 = 0.50 $2.50/6 = 0.41

Average of 3 = $\frac{(0.62 + 0.50 + 0.41)}{3}$ = $0.51

Avrg Cost of 1 Pupusa

PART TWO: Menu + $ T3

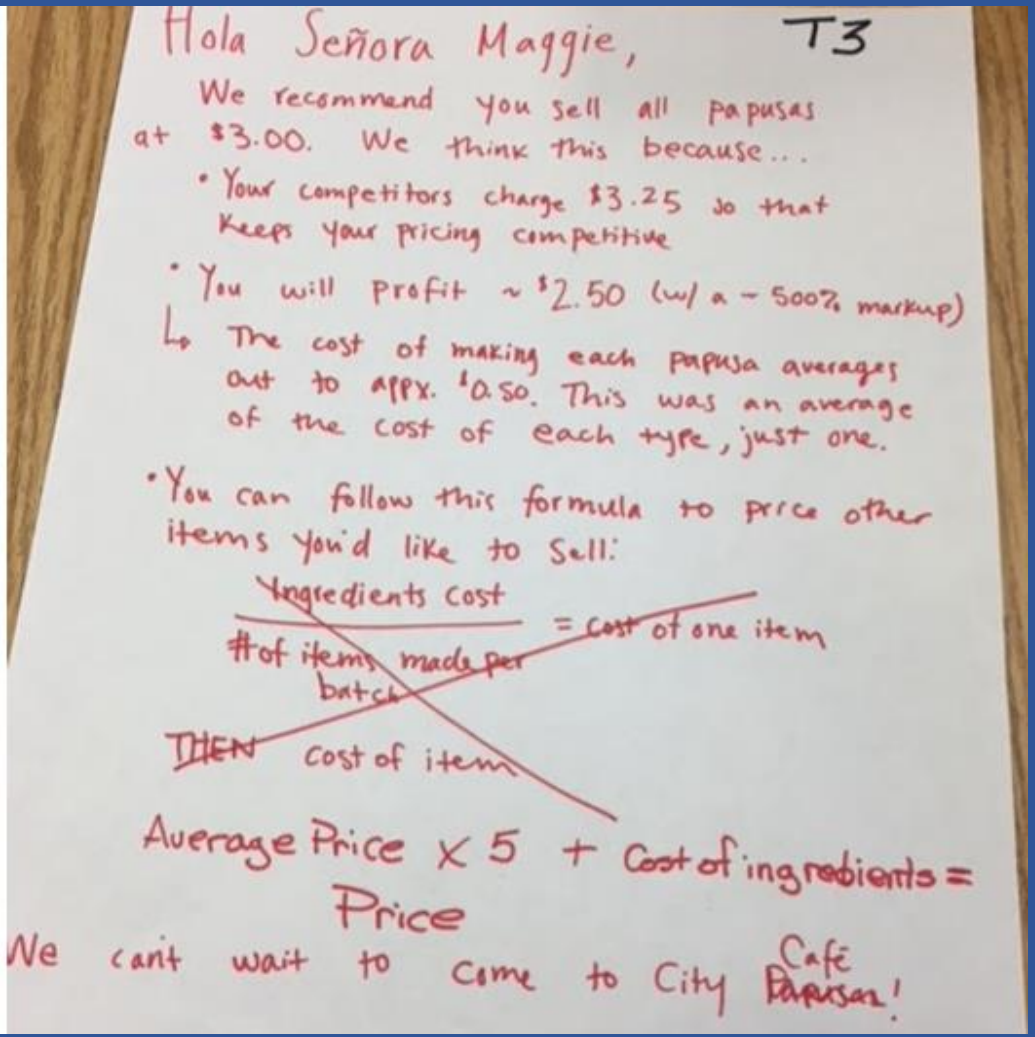
OUR MENU: Pollo con Queso, Frijoles con Queso, Chicharrones } $3.00

WHY:

The average cost of a pupusa is 3.25 based on ~~one~~ research.

Bean and Cheese: .21
Pork = .76
Chicken and Cheese: .51
} Average .49

To be competitive with Market value 3.00 for all pupusas.


Hola Señora Maggie, T3

We recommend you sell all papusas at $3.00. We think this because...

- Your competitors charge $3.25 so that keeps your pricing competitive
- You will profit ~$2.50 (w/ a ~500% markup)
- The cost of making each papusa averages out to appx. $0.50. This was an average of the cost of each type, just one.
- You can follow this formula to price other items you'd like to sell:

Ingredients cost / # of items made per batch = cost of one item

THEN cost of item

Average Price x 5 + Cost of ingredients = Price

We can't wait to come to City Cafe Papusas!

Table 3
Letter

Table 4

PART ONE

Cost of ONE pupusa T4

Assumptions:

* all variations are ordered equally
* averaged price of cheese
* everyone is getting cheese
* wrapper is free
* owner wants just the cost of pupusa NOT OVERHEAD / LABOR
* one batch makes 5

Plan / Formula:

1. Determine cost of each variety using the cost of each ingredient to scale

- Queso - $2.25 → .45
- pollo - $2.13 → .43 (÷ 5)
- chicharrones - $3.75 → .75
- frijoles - $1.50 → .30

2. Average the cost of all varieties TOGETHER

$$\frac{\$2.\overset{45}{\cancel{25}} + \$2.\overset{43}{\cancel{13}} + \$3.\overset{75}{\cancel{75}} + \$1.\overset{30}{\cancel{50}}}{4} = \$2.40\cancel{75} \rightarrow \$2.41$$

COST OF ONE : .48

Adjustments:

Use the formula to ... when ...

- price of ingredient changes (A)
- variety changes (B)

A / B

PART TWO

Recommended Price T4

Assumptions:

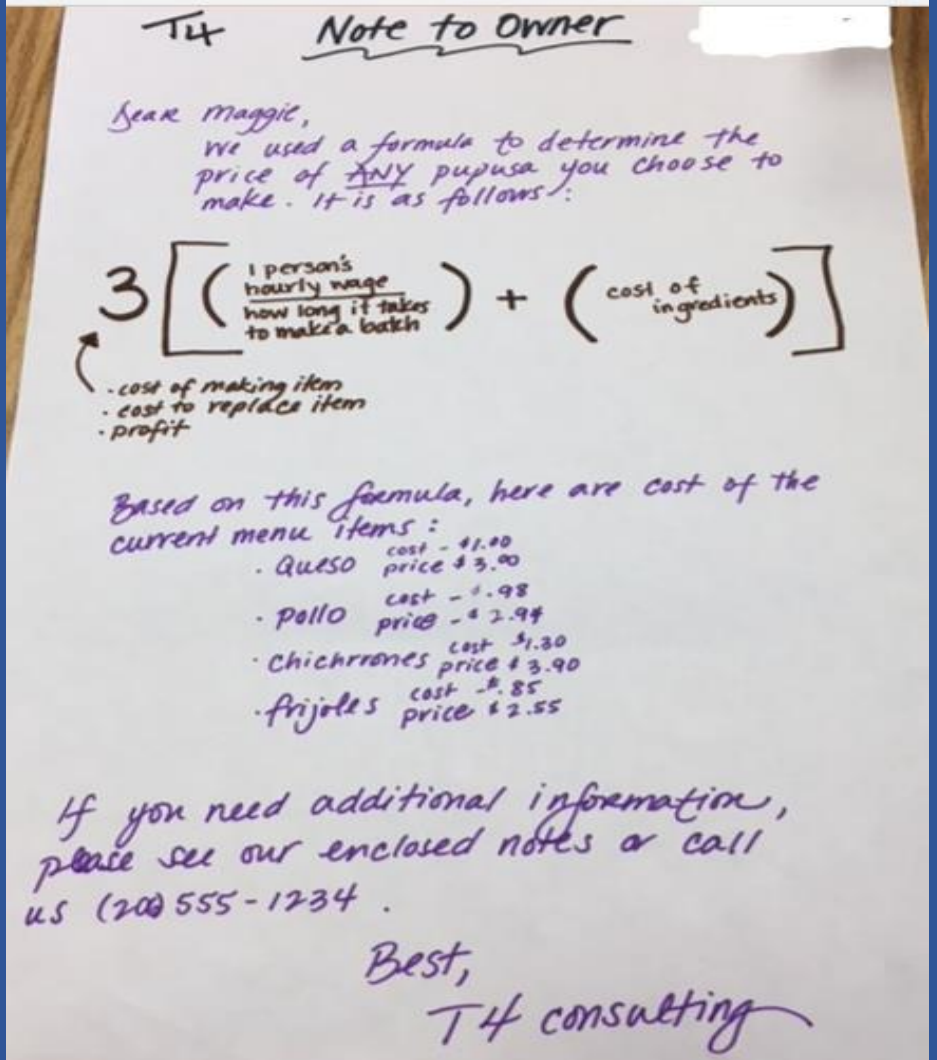
* Give owner 2 options: most expensive AND least expensive
* Assuming cost of labor is the same per employee ($11/hr)
* production is the same per employee
* tax is added after cost/price

Plan/ Formula:

Formula: (cost to make item (~~2.49~~ .55 + ____)
+ (cost to replace item
+ (profit (cost to make) =

Chichrrones = $~~1.80~~ 3.90 per 1
cost $1.30

Frijoles = $~~1.00~~ 2.55 per 1
cost $.85



T4 Note to Owner

Dear Maggie,
We used a formula to determine the price of ANY pupusa you choose to make. It is as follows:

$$3\left[\left(\frac{\text{1 person's hourly wage}}{\text{how long it takes to make a batch}}\right) + (\text{cost of ingredients})\right]$$

- cost of making item
- cost to replace item
- profit

Based on this formula, here are cost of the current menu items:

- Queso cost - $1.00 price $3.00
- Pollo cost - $1.98 price - $2.94
- Chicharrones cost $1.30 price $3.90
- frijoles cost - $.85 price $2.55

If you need additional information, please see our enclosed notes or call us (200 555-1234.

Best,
T4 consulting

Table 4 Letter