

Math-in-CTE Lesson Plan Template

Lesson Title: Deli Menu Recipe Costing		Lesson #
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Occupational Area: Advanced Culinary Arts Level 2/3		
CTE Concept(s): HTPA07.01 Research costs, pricing and market demands to manage profitability and implement and implement effective marketing strategies.		
CTE Standard: HTPA07.01.01.04 Determine menu pricing		
Math Concepts: Rate Conversions		
Common Core SS Math Standard: Analyze proportional relationships and use them to solve real-world and mathematical problems Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.		
Lesson Objective: Café menu development and costing		
Materials: Chart of Equivalents, Recipe and Recipe Costing Sheet		

THE "7 ELEMENTS"	TEACHER NOTES (and answer key)
<p>1. Introduce the CTE lesson.</p> <p>The students will be developing and costing recipes for the deli.</p> <p>Each student will receive a copy of the chart of equivalents, a chosen recipe and a recipe costing sheet.</p>	
<p>2. Assess students' math awareness as it relates to the CTE lesson.</p> <p>Review the concept of rate conversions.</p>	

<p>3. Work through the math example <i>embedded</i> in the CTE lesson.</p> <p>Use recipe and recipe costing sheet on smart board to work with the class on the example. Interactively, use the class to fill out the sheet with example of the math. Stretch out the lesson on costing by looking at examples of how the costing can change. Example; west coast ingredients vs. east cost product.</p>	
<p>4. Work through <i>related, contextual</i> math-in-CTE examples.</p> <p>Stretch out the lesson on costing by looking at examples of how the costing can change. Example; west coast ingredients vs. east cost product.</p>	
<p>5. Work through <i>traditional math</i> examples.</p> <p>Traditional math content: Unit conversions and cross multiplication</p> <p>Restaurant term for unit conversions: the bridge method</p>	
<p>6. Students demonstrate their understanding.</p>	
<p>7. Formal assessment.</p> <p>Students will turn in finished costing sheets for developed recipes.</p>	

Garlic Roasted Mashed Potato

2 pounds potato
1 head of garlic
1 cup half and half
2-tbl butter, small dice
2-tbl thyme
salt and pepper to taste

1. To roast garlic cut off top of garlic. Place in foil with olive oil, salt and pepper. Wrap up foil and roast in oven for 20 to 25 minutes. When finished roasting squeeze from bottom to release cloves. Set aside.
2. Place potatoes in saucepan add water just to cover. Bring to a boil and then simmer until tender enough to mash.
3. In a small saucepan heat half and half and add roasted garlic. Let set in warm half and half for ten minutes to infuse the flavor of the garlic.
4. Add warm half and half, butter and spices to potatoes and mash to desired consistency.

Serve warm and enjoy.

Unit Equivalency Chart

1 Pinch	$\frac{1}{8}$ Teaspoon				
1 Tablespoon	3 Teaspoons	$\frac{1}{2}$ Fluid Ounce			
2 Tablespoons	$\frac{1}{8}$ Cup	1 Fluid Ounce			
4 Tablespoons	$\frac{1}{4}$ Cup	2 Fluid Ounces	$\frac{1}{8}$ Pound		
8 Tablespoons	$\frac{1}{2}$ Cup	4 Fluid Ounces	$\frac{1}{4}$ Pound		
12 Tablespoons	$\frac{3}{4}$ Cup	6 Fluid Ounces	$\frac{1}{3}$ Pound		
16 Tablespoons	1 Cup	8 Fluid Ounces	$\frac{1}{2}$ Pound		
1 Pint	2 Cups	16 Fluid Ounces	1 Pound		
1 Quart	4 Cups	32 Fluid Ounces	2 Pounds	2 Pints	
$\frac{1}{2}$ Gallon	8 Cups	64 Fluid Ounces	4 Pounds	2 Quarts	4 Pints
1 Gallon	16 Cups	128 Fluid Ounces	8 Pounds	4 Quarts	8 Pints

Abbreviations

Teaspoon	tsp	t
Tablespoon	Tbsp	T
Cup	C	
Pint	pt	
Quart	qt	
Gallon	gal	
Ounce	oz	
Pound	lb	#