

**Math-in-CTE Curriculum Map:
Hospitality and Tourism (Culinary Arts)**

CTE Course/Unit	CTE Concepts	Math Concepts	Common Core Math Standards Middle School	Common Core Math Standards High School
Bread; Pie; Cookie; Cake; Sweet dough; Custard/pies; Quick bread confections	Formula conversion; Ingredient; Mise en place; Yield; Weights and measures; Oven management	Tables; Conversions; Proportions; Formula; Fractions; Area (sheet cake); Units of measurement; Intervals	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3; 6.RP.1; 6.RP.2; 6.RP.3; 7.RP.1; 7.RP.2; 7.RP.3; 6.NS.1; 6.EE.2; 7.NS.2; 7.NS.3; 6.EE.2; 7.EE.1; 7.EE.2; 6.G.1; 6.G.2; 6.G.3; 7.G.1; 7.G.4; 7.G.6	A.APR.1; A.APR.7; N.RN.3; N.Q.1; A.REI.1; A.REI.2; G.GPE.7; G.MG.2
Inventory	Analyze amount of product on hand, what is needed, ordering, etc.	Math operations; Problem solving; Accuracy; Cost; Decimals; Spreadsheet; Charts	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3; 6.NS.5; 7.NS.2; 7.NS.3; 6.EE.2; 6.EE.3; 6.SP.4; 6.SP.5; 7.SP.2; 7.SP.3; 7.SP.4; 8.SP.3; 8.SP.4	A.APR.1; A.APR.7; N.RN.3; N.Q.1; N.Q.2; N.Q.3; S.ID.6; S.IC.1; S.IC.2; S.IC.3; S.IC.4; S.IC.5; S.IC.6; S.ID.1
Safety and sanitation	Safety and sanitation; Cleaning	Tables; Graphing; Ratio/	6.NS.2; 6.NS.3; 7.NS.1;	A.APR.1; A.APR.7; N.RN.3; N.Q.1;

	solutions; Food safety; Determine temperature control	proportion; Percent; Exponential growth ; Reading thermometer; F/C; Patterns	7.EE.3; 6.RP.1; 6.RP.2; 6.RP.3; 7.RP.1; 7.RP.2; 7.RP.3; 6.RP.2; 6.RP.3; 7.EE.2	G.MG.3
Yield testing	Breakdown; Carcass to retail cuts	Fractions; Percents; Decimals; Adding/ subtracting weights	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3; 6.NS.1; 6.EE.2; 7.NS.2; 7.NS.3; 6.NS.2; 6.NS.3; 6.NS.5; 6.RP.2; 6.RP.3; 7.EE.2	A.APR.1; A.APR.7; N.RN.3; N.Q.1
Reading of measurement equipment	Reading measurement tools	Fractions; Percent; Decimals; Adding/ subtracting weights	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3; 6.NS.1; 6.EE.2; 7.NS.1; 7.NS.2; 7.NS.3; 6.NS.5; 6.RP.2; 6.RP.3; 7.EE.2	A.APR.1; A.APR.7; N.RN.3; N.Q.1
Checks/ balances	Add receipts; Give change	Adding/ subtracting decimals; Tax	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3; 6.NS.5; 7.NS.2; 7.NS.3	A.APR.1; A.APR.7; N.RN.3; N.Q.1
Basic stocks; Roasting; Grilling	Sauce making; Grill set-up; Rotisserie	Temperature C to F; Hi to low; Heat variation factors;	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3	A.APR.1; A.APR.7; N.RN.3; N.Q.1

		Measuring liquids with large units		
Dough making; Basic pastry	Dough making; Baking technique; Poaching; Dip frying	Time keeping (units); Precise measurement	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3	A.APR.1; A.APR.7; N.RN.3; N.Q.1
Beverage service	Determine yield; Collect ingredients; Measure amounts; Create drink	Yield division; Measurement	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3	A.APR.1; A.APR.7; N.RN.3; N.Q.1
Tableside cookery	Find recipes; Determine yield; Collect ingredients and prep; Measure crate	Yield division; Measurement	6.NS.2; 6.NS.3; 7.NS.1; 7.EE.3	A.APR.1; A.APR.7; N.RN.3; N.Q.1
Equipment ID Steps of service; Terms				
Setting dining room and side stand	Determine equipment needed; Place equipment			
FOH position/ organizations				