

# Consumer Math CP Unit 1: Nutrition

<b>Unit #:</b>	APSDO-00020121	<b>Duration:</b>	5.0 Week(s)	<b>Date(s):</b>	
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**Grades:**  
11, 12

**Subjects:**  
Mathematics

## Unit Focus

In this unit, students will use percents to analyze nutritional facts to make healthy food choices. Students will also use unit analysis to make different quantities of recipes and decide best buys between consumer products. Students will make cost comparisons based on unit prices. Summative assessments may include projects, labs and tests.

## Stage 1: Desired Results - Key Understandings

Established Goals	Transfer	
<p><b>Common Core</b> <i>Mathematics: 12</i></p> <ul style="list-style-type: none"> <li>• Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions. <i>CCSS.MATH.CONTENT.HSA.CED.A.1</i></li> <li>• Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays. <i>CCSS.MATH.CONTENT.HSN.Q.A.1</i></li> <li>• Create equations in two or more</li> </ul>	<p><b>T1</b> (T50) Based on an understanding of any problem, initiate a plan, execute it and evaluate the reasonableness of the solution.</p> <p><b>T2</b> (T53) Articulate how mathematical concepts relate to one another in the context of a problem or in the theoretical sense.</p> <p><b>T3</b> (T51) Examine alternate methods to accurately and efficiently solve problems.</p> <p><b>T4</b> (T52) Use appropriate tools strategically to deepen understanding of mathematical concepts.</p> <p><b>T5</b> (T13) Move from one representation to another without changing the quantity.</p> <p><b>T6</b> (T14) Perform operations within the real and complex number system.</p>	
	Meaning	
	Understandings	Essential Questions
	<p><b>U1</b> (U510) Every problem is a member of a category of problems that has a similar structure and set of characteristics.</p>	<p><b>Q1</b> (Q512) What information is needed and how do I use it to solve a problem?</p> <p><b>Q2</b> (Q513) How could this strategy be used to</p>

<p>variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. <i>CCSS.MATH.CONTENT.HSA.CED.A.2</i></p> <ul style="list-style-type: none"> <li>Define appropriate quantities for the purpose of descriptive modeling. <i>CCSS.MATH.CONTENT.HSN.Q.A.2</i></li> <li>Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. <i>CCSS.MATH.CONTENT.HSN.Q.A.3</i></li> <li>Reason abstractly and quantitatively. <i>CCSS.MATH.MP.2</i></li> <li>Use appropriate tools strategically. <i>CCSS.MATH.MP.5</i></li> </ul>	<p><b>U2</b> (U512) Mathematicians use diagrams, symbols, and terms to describe problems or situations</p> <p><b>U3</b> (U540) The choice of a mathematical tool depends upon the information you have and the information you want.</p> <p><b>U4</b> (U103) The same value can be represented in multiple ways.</p> <p><b>U5</b> (U104) Mathematics is a universal language that uses assumed and logical statements to describe the world.</p>	<p>solve similar problems?</p> <p><b>Q3</b> (Q103) What is the value of this number/relationship and how can I represent it in different ways?</p> <p><b>Q4</b> (Q104) How do I use my number sense to perform operations?</p>
<b>Acquisition of Knowledge and Skill</b>		
<b>Knowledge</b>	<b>Skills</b>	
	<p><b>S1</b> Convert between percent, ratio and decimal</p> <p><b>S2</b> Calculate calories from fat, protein, and carbohydrates</p> <p><b>S3</b> Effectively interpret nutritional labels</p> <p><b>S4</b> Use percents to calculate how much a consumer saves</p> <p><b>S5</b> Use unit analysis to compare best buys</p> <p><b>S6</b> Using percents and unit analysis to make healthy food choices for eating out</p> <p><b>S7</b></p>	

		Find and use applications that support nutritional analysis
<b>Stage 3: Learning Plan</b>		
<b>Coding</b>	<b>Code</b>	<b>Description of Learning Activity</b>