**Math-in-CTE Lesson Plan Template**

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| Lesson Title: Measuring Practice-Enrichment Worksheet | | | Lesson # 10 |
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| Occupational Area: FACS-Food and Nutrition 1 | | | |
| CTE Concept(s): Calorie Calculations for Individual Needs | | | |
| Math Concepts: Addition, Subtraction | | | |
| Lesson Objective: | Students will demonstrate ability to effectively recognizing equivalents when measuring dry and liquid ingredients.  State Standard1.3: Identify appropriate abbreviations, food-measurement terminology, techniques, equivalents, and calculate recipe-size adjustments and demonstrate proper measuring techniques | | |
| Supplies Needed: | Measuring Practice Worksheet, Answer Key, Food Cut-Outs | | |

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| **The "7 Elements"** | **Teacher Notes**  **(and answer key)** |
| 1. **Introduce the CTE lesson.**   Today, we’re going to do a little experiment. Yay! I’m going to hand out your experiment paper and show you a short explanation of what we’re going to do.  Make sure your name is on your experiment paper. Next, fill in your age, gender, activity level and daily calorie needs according to the chart on the PowerPoint.  On the back table, you will find picture cut-outs of various food items. When you are ready, go to the back table and choose what food you would typically eat in one day. Remember to include breakfast, lunch, dinner and all snacks. Bring three at a time back to your table and begin filling out the chart on your experiment worksheet. When you have finished filling out the information for those three food items, exchange them for three new food items and continue filling out the chart until you have recorded all food items for your typical day. | For math examples and teaching information, please reference Lesson #3-Calorie Calculations. All concepts are the same.  Note: This could be done as a review of the Dietary Analysis Assignment or as a lesson prior to the Dietary Analysis Assignment.  Show the chart on the PowerPoint explaining individual caloric needs so that the students can fill in their paper. (Slides 1-4). |
| **2. Assess students’ math awareness as it relates to the CTE lesson.**  After you have recorded all of the information for each of your food items and filled out your chart, add up how many servings you have eaten from each food group on the bottom left portion of your worksheet.  Now let’s take a look at how much you should really be consuming from each food group. (Show and discuss the remaining slides of the PowerPoint.)  (Pause on slide 7 for discussion.) As you look at this chart, fill in the appropriate serving sizes on the bottom right portion of your worksheet. Now, compare the two charts at the bottom of your page and assess the differences in appropriate serving sizes. Did you eat too much? Did you eat too little? What are the consequences of either of these scenarios? What steps could you take to eat the appropriate amounts from each Food Guide Pyramid group. | After they finish filling out their individual charts continue showing the slides of the PowerPoint, (Slides 5-6).  Show Slide 7 in the PowerPoint. |
| **3. Work through the math example *embedded* in the CTE lesson.**  (Students will work through the embedded math examples by working on the worksheet.) |  |
| **4. Working through related, contextual math-in CTE examples**  (Students will work through the contextual math examples by working on the worksheet.) |  |
| **5. Work through *traditional math* examples.**  (Students will work through the traditional math examples by working on the worksheet.) |  |
| **6. Students demonstrate their understanding.**  (Students will demonstrate their understanding by working on and completing the worksheet.) |  |
| **7. Formal assessment.**  (The formal assessment is the worksheet and also the class discussion at the end of the lesson.) |  |