### Critical Components of Lesson Design Template

**Directions:** Download the document to your computer. Save it as *YourName_Lesson X* (replace X for the number of the lesson, i.e., 1, 2, or 3). Fill in each section. Each textbox will expand to allow you to enter as much text as needed. SAVE the document and upload it to your instructor using the assignment link within the lesson.

<table>
<thead>
<tr>
<th>Planning</th>
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<tbody>
<tr>
<td><strong>Author</strong></td>
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<tr>
<td><strong>Subject(s)</strong></td>
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<td><strong>Topic or Unit of Study</strong></td>
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<tr>
<td>Systematic Listing and Counting, Multiple Combinations (lesson #3 of 3)</td>
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<tr>
<td><strong>Grade/Level</strong></td>
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<tr>
<td><strong>Materials and Media</strong></td>
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<tr>
<td>● The Night Before Thanksgiving,</td>
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<td>● Large picture cards of various Thanksgiving day foods (for modeling)</td>
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<tr>
<td>● 8 sets of manipulatives with 18 plates, 9 ham, 9 turkey, 6 corn, 6 cranberry, 6 mashed potato, 6 pumpkin pie, 6 apple pie, and 6 pecan pie each</td>
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## Standards

**AZ- Common Core State Standards (2012)**
**Subject:** Mathematics
**Grade:** Grade 4
**Domain:** Operations and Algebraic Thinking (OA)

Use the four operations with whole numbers to solve problems.

**Area:** Use the four operations with whole numbers to solve problems.

**Standard:** AZ.4.OA.A.3.1 Solve a variety of problems based on the multiplication principle of counting.

a. Represent a variety of counting problems using arrays, charts, and systematic lists, e.g., tree diagram.

Analyze relationships among representations and make connections to the multiplication principle of counting.

## Measurable Objectives

**Measurable objectives identify what the student will know and be able to do by the end of the lesson. Objectives include references to expected performance/behavior and specific criteria for mastery. The measurable objectives should be aligned to the standards selected.**

Using the manipulatives provided, students will work in groups of three or four to create 15 of the possible 18 (80%) combinations of a meat (turkey or ham), a fruit or vegetable (corn, cranberries, or mashed potatoes), and a dessert (pumpkin pie, apple pie or pecan).

## Summary

**Provide a brief overview of your activity.**

Students will learn about and practice how to make different “combinations”.

## Differentiation

**How will you meet the needs of all your students (variables could include readiness, rate of learning, interest, learning styles, flexible groups, products demonstrating mastery).**

Once I check for understanding, and I have identified students who are struggling, I can work with them individually or as a small group. All students have an “open invitation” to sit at the back table for a little bit of extra teacher help. Students who complete the activity quickly, may want to engage in an extension activity by visiting our “Math Lab” station and engaging in independent or peer practice.

## Remediation

Teacher will work with struggling students at back table offering multiple examples (modeling) and manipulatives.

Teacher will work with struggling students at back table offering multiple examples (modeling) and manipulatives (fruit picture cards).
| Extensions | Enhancement of the content (Bloom’s Taxonomy/Webb’s Depth of Knowledge) that will go above and beyond the measurable goals.  
Create a combinations problem for others to solve involving more than 3 food items and create a detailed answer key with narrative explanation. |
| --- | --- |
| Assessment | This includes the data collected prior to this lesson that drives instruction. This could include teacher-made tests, DIBELS, progress monitoring, state/district assessments, etc. Include a summary of the data collected to inform your instructions.  
Beginning of the year STAR assessment (includes skills-based test items and in-depth reports for screening, instructional planning, progress monitoring, and standards benchmarking) indicated all students need additional instruction and practice with combinations.  
Post-Assessment: Data collected which demonstrates student proficiency and student mastery of measurable lesson objective(s). Summative assessment may include; skill based checklist, rubric, developmental scale, answer key for test, essay, worksheet, or quiz. Formative assessment may include; a question and answer session, performance observation, individual contributions to collaborative group projects in order to guide future lesson planning.  
Teacher checklist will indicate student mastery (15 out of 18 correct combinations) |
| Pre Assessment Data (if applicable) | Assessment/Rubrics | You can paste your rubric here, or (if too long) write the title here and upload it to your instructor when you submit this lesson.  
Multiple Combinations Checklist |
| Teacher Facilitated Instruction | Anticipatory Set with Purpose | (Written in narrative form) The anticipatory set is to grab the students' attention. The teacher actively engages and motivates the students about the lesson topic through conversation, visuals, read alouds, computer clip, critical thinking questions, etc. The anticipatory set should be relevant to the lesson and link students' prior learning to the current lesson focus. It is important for the teacher to directly state the new concept/skills and/or strategies the students will be learning and how it will apply to their own lives (age appropriate). |
| Instructional Sequence | This portion of the plan should include: direct instruction, modeling, guided practice, active engagement, checking for understanding, and an independent activity. In order to demonstrate your thorough knowledge of each critical component, you will insert an abbreviated indicator at the end of each content item. Direct Instruction: (DI) Modeling: (M) Guided Practice: (GP) Active Engagement (AE) Checking for Understanding: |
Independent Activity

This is commonly called homework or seatwork. Unlike the guided practice, the teacher is not present to correct mistakes. The purpose of this practice is to help in the retention of the material that is covered.

(Similar as Thanksgiving Dinner) Students will create a minimum of 5 different school outfit combinations and share their findings with a parent.

Closure

(Written in narrative form) Revisiting or reflecting on the measurable goals here will help organize the information into a meaningful context in the students’ minds. Keep in mind that the closure portion of the lesson is not the end point of the skill or subject but a final “check for understanding” used at the end of the class period or before changing subjects. The information gathered during this portion of the lesson will help the teacher plan future instruction.
“We are so lucky that we usually have choices and therefore can make combination of our choices. The next time you order ice cream or make a sandwich, think about all of the choices that you have and all of the combinations you could make. Let’s have each group share out how they recorded their combinations.”