Part A: Task Research Template

Name: Jane Alexander

Grade: 1	Task Title: "Luau"
	Source: http://ccak52012.wikispaces.com/

Domain & Cluster	Content Standard(s)	Mathematical Practice(s)
Domain: Operations and Algebraic Thinking **Cluster:** Represent and solve problems involving addition and subtraction.	**Standard 1.OA.A.1:** Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning

Shifts of the Common Core State Standards		
Focus Find your grade here.	**Coherence** Wiring Document Learning Trajectories http://www.corestandards.org/	**Rigor** *Select all that apply*
Major Supporting Additional	**Builds from**….K.OA.A.1, KOA.A.2 **Connects to**…1.OA.A.2, 1.MD.A.4 **Builds up to**….2.OA.A.1	Conceptual Understanding • Key words to look for in standards: *Understand, Interpret, Recognize, Describe, Explain* Procedural Fluency • Key word to look for in the standards: *Fluently* **Application** • Key words to look for in standards: *Solve real-world and mathematical problems, Apply*

Part B: Task Analysis Template

Criteria of Worthwhile Task	Rating				Notes on how to enhance or improve the task
Task Analysis					
1. Mathematics is grade-level appropriate	1	2	3	**4**	
2. Makes connections between concept and procedures	1	**2**	3	4	Consider having students critique the approach and solution of a hypothetical student who used addition and another hypothetical student who used subtraction
3. Makes connections between different mathematical topics	**1**	2	3	4	Possibly connect to 1.OA.2 by including more than 2 addends or 1.MD.4
4. Requires reasoning (nonalgorithmic thinking)	1	2	**3**	4	Incorporate one addend unknown and both addends unknown problem structures
5. Connects to real situations that are familiar and relevant to them	**1**	2	3	4	Change the task to a more familiar context for students
6. Is appropriately challenging and accessible (engages students' interests and intellect)	1	**2**	3	4	Incorporate writing an equation Possible extension: If you want to buy some blue leis and some red leis, how many of each color could you buy to have enough for the guests?
7. Provides multiple ways to demonstrate understanding of the mathematics concepts and procedures	1	2	**3**	4	Provide manipulatives for students to model the problem
8. Requires students to illustrate or explain mathematical ideas	**1**	2	3	4	Add a component instructing students to draw a picture to show their thinking or use an open number line to prove their solution

Adapted from Bay-Williams, J.M. McGatha, M., Kobbet, B., & Wray, J. (2014). *Mathematics Coaching: Resources and Tools for Coaches and Leaders, K-12.* Boston: Pearson.

1 = No evidence of the quality in the task, or it is not possible to address this quality with the task
2 = The quality is evident in minor ways, or incorporating it is possible.
3 = The quality is evident in the task
4= The quality is central to the task and is important to the success of the lesson

Part C: Task Rewrite Template

Created by:	Jane Alexander
Task Title	"Luau" / "Arcade Tickets"
Grade:	1
Standard:	**1.OA.A.1**: Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
Original Task:	http://ccak52012.wikispaces.com/ I am planning a Luau. I need to make sure I have enough leis for everybody. There will be 20 people at the Luau. I have 6 leftover from last year. How many more will I need, so that everybody will have one?

Rewritten or Revised Task

Jay is going to the arcade to play some games. He wins 20 tickets to get prizes.

Prize	Taffy	Bouncy Ball	Slinky	Stuffed Dragon
Number of Tickets Needed	1	3	4	6

Jay wants to get at least one of each prize, and can get more than one of the same prize. Draw a picture to show Jay which prizes he could get using all of his tickets. Write a number sentence to match your picture.

If Jay has already used some of his tickets to get 2 bouncy balls, how many more tickets does he have to spend on prizes? Use numbers and pictures to show how you know.