Part A: Task Research Template

Name:

Grade:	**Task Title:** **Source**:

Domain & Cluster	Content Standard(s)	Mathematical Practice(s)
Domain: **Cluster:**		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. *HS teachers, this does not apply.	**Coherence** Wiring Document Learning Trajectories http://www.corestandards.org/	**Rigor** *Circle all that apply*
Major Supporting Additional	Builds from…. Connects to… Builds up to…	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

The purpose of the Task Analysis tool is to support teachers in selecting worthwhile tasks. While a task may not meet every Criteria of a Worthwhile Task, teachers should use their judgment to determine if the task meets enough of the criteria to be a useful instructional task or if the task should be improved to better meet specific criteria.

Task Analysis					
Criteria of Worthwhile Task	**Rating**				**Notes on how to enhance or improve the task**
1. Is grade-level appropriate *Does the task align to the grade-level standard?*	1	2	3	4	
2. Makes connections between concept and procedures *What conceptual understandings are embedded in this task that students should takeaway as a result of doing this task?* *Does the task support students in understanding the concept(s) upon which a procedure is based?* *What misunderstandings or roadblocks may be surfaced by the task?*	1	2	3	4	
3. Makes connections between different mathematical topics *What other cluster(s) or standard(s) does the task directly connect or potentially connect to?*	1	2	3	4	
4. Requires reasoning (nonalgorithmic thinking) *Does the task require students to do more than just reproduce a procedure?* *What misunderstandings or roadblocks may be surfaced by the task?*	1	2	3	4	
5. Connects to real situations that are familiar and relevant to students *Does the task connect mathematical concepts and procedures to their real world applications?* *What contextual features of the task must the students understand in order to successfully engage in the task?*	1	2	3	4	
6. Is appropriately challenging and accessible (engages students' interests and intellect) *What modifications or accommodations may need to be in place to support learning by all students (e.g., ELLs, students w/ IEPs or 504s as well as students whose understanding is beyond the task)?*	1	2	3	4	
7. Provides multiple ways to demonstrate understanding of the mathematical concepts and procedures *How might students solve the problem? What prior knowledge might they apply to the task?* *Is there more than one approach students could take to solve the task? Is there more than one solution to the task?*	1	2	3	4	
8. Requires students to illustrate or explain mathematical ideas *What representations could be used to model the mathematical concepts and procedures embedded in this task?* *How will students explain or justify their thinking?*	1	2	3	4	

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 = The quality in the task is not evident, 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:	
Original task Title / New task title	
Grade:	
Standard:	
Original Task:	

Rewritten or revised task
Questions to think about … • *What features of the original task do you like?* • *What is the mathematical content of the original problem?* • *What aspects of the original task make the students think and struggle?* • *What can be taken out or modified to create constructive struggling?* • *What steps does the original task give the students that they could come up with on their own?* • *Which of the 8 Standards for Mathematical Practice does the original task contain?* • *What can we modify to make sure that the Standards for Mathematical Practice are included?* • *Are the numbers in the original task purposeful, or could you change them to serve a specific purpose?* • *What features of the original task could be changed or improved?* • *What features could be added to the original task?* • *What features could be deleted from the original task?* • *How could you open up the original task so that there are multiple approaches or solutions?* • *Is there a real-world context you could use that would give students a reason to solve this original task?* • *How can you incorporate a feature that requires students to illustrate or explain their thinking?*
Task extensions