

**A deep, rich, interesting math
problem**

**Meets most, if not all, of the CCSSM
mathematical practices**

Relevant to kids' lives

**Meets more than one of the CCSSM
content standards**

Open ended

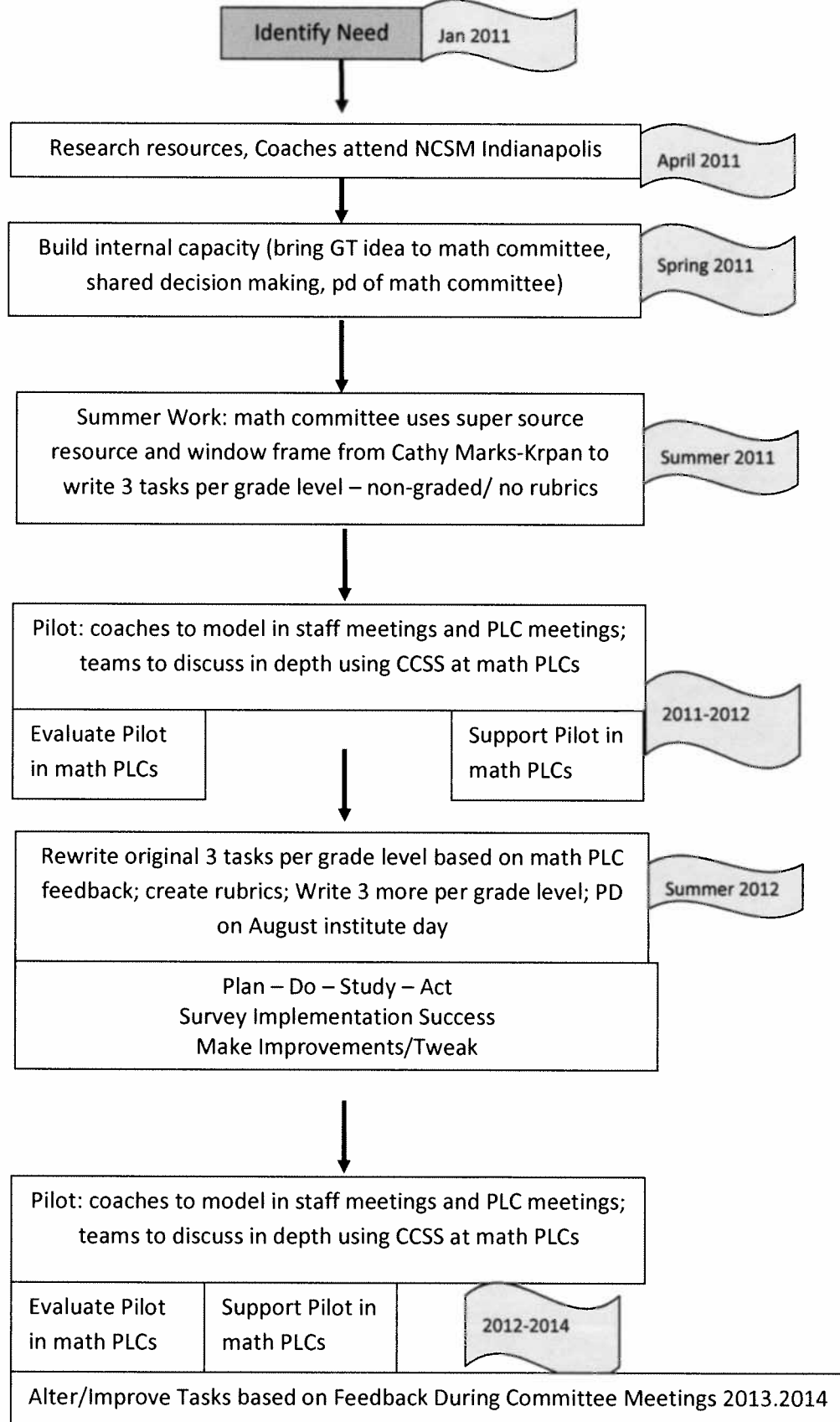
Great Tasks: 2012 – 2014

KEY	
Green cells	Assessed in Pinnacle
	Place Value
	Fractions

Grade	Trimester One		Trimester Two		Trimester Three	
	Task One	Task Two	Task Three	Task Four	Task Five	Task Six
K	How Many Rectangles (color tiles)	Pattern Block Fish (pattern blocks)	Attribute Trains (attribute blocks)	Fractions to Fourths (buttons) 	Frames of Ten (ten frames – place value) 	Feed the Birds (counters)
1	The Disappearing Train (snap cubes)	Cover the Caterpillar (pattern blocks)	Invitations (ruler)	Scrabble Number Sentences (letter tiles with pt. values)	Making Fractions (geoboard) 	Way to Pay (base ten blocks and/or money) 
2	Toy Factory (pattern blocks and coins)	Build a Bug House (place value blocks and place value mat)	Valentine's Day Cards (rulers)	Tile Maker (pattern blocks)	Fraction Pairs (cuisenaire rods) 	Dream Day (Judy clocks and charts)
3	Sub Sandwich (ruler and scale)	Thanksgiving Turkey (elapsed time, chart, clock)	Build a Fence (color tiles)	Geometric Design (geoboards)	Fraction Design (pattern blocks) 	Heart Rate (place value mat) 
4	Angles and Times (clocks)	Day at the Pier (elapsed time, money, charts)	Making Eighths (geoboard) 	Snowman (charts/tables)	Part and Whole (geodot paper & fraction puzzles)	You Bought a Zoo (place value mat) 
5	Chairs Around the Table (counters)	If the World Were a Village (place value mat) 	Forming Fractions (geoboards) 	It's What Inside that Counts (tangrams)	Plan a Park (scale/data table)	Painted Cubes (snap cubes)

D41 Great Tasks Implementation

2011 – 2014



Math practices	Not Meeting	Progressing	Meeting	Advanced
Makes sense of problems and perseveres in solving them	- Does not understand the task - Does not attempt the task	- Partial understanding of the task - Makes an attempt to solve task - Partial determination of important information	- Completely understands the task - Successfully solves task - Works consistently toward one correct solution	- Completely understands the task - Successfully solves task - Perseveres and finds multiple solutions - Plans solution pathways and continually asks, "Does this make sense?"
Reasons abstractly and quantitatively	- Does not attempt to represent the task using symbols such as operation signs and numbers - Makes many computational errors	- Attempts to represent the task using symbols such as operation signs and numbers - Makes minor errors in computation	- Able to correctly represent the task using symbols such as operation signs and numbers - No computational errors	- Able to symbolically represent the mathematical task correctly in more than one way - No computational errors
Constructs viable arguments and critiques the reasoning of others	- Writing is confusing or absent - Chooses not to discuss the problem, ask questions of others, or create justifications for his/her plan	- Some writing displays appropriate application of the information - Incomplete responses and/or inability to discuss mathematical concepts - Lack of appropriate reasoning and justifications	- Writing displays simple yet accurate application of the information - Asks some questions and supports plan with appropriate reasoning and justifications	- Written explanation is complete, clear and includes relevant mathematical vocabulary - Discussion displays clear justifications - Asks questions of other students in a useful and respectful manner
Models with mathematics	- No evidence of organization of information - No evidence of calculations - No evidence of work towards results	- Makes errors in organization of information - Calculation errors - Little evidence of reflection on results and/or revisions	- Work is well organized - Calculations are accurate - Student is able to construct model - Evidence of reflection on results and/or revisions	- Work is well organized - Calculations are accurate - Student is able to construct model - Evidence of reflection on results and/or revisions - Revisions improve model

Uses appropriate tools strategically	○ Unable to complete the task ○ Unable to use tools correctly ○ Unable to use tools strategically	○ Uses tools correctly ○ Attempts to use tools strategically ○ May make errors in units	○ Uses tools correctly ○ Uses tools strategically ○ Uses tools to check accuracy of solution and judge reasonableness	○ Uses tools correctly ○ Uses tools strategically ○ Uses tools to check accuracy of solution and judge reasonableness ○ Develops an understanding of what tools can and can not do
Attends to precision	○ No attempt to calculate or label work ○ No attempt to use mathematical vocabulary in writing or discussion	○ Makes errors in calculation and/or work is not labeled appropriately ○ Attempts to use some mathematical vocabulary correctly in writing or discussion ○ Work is disorganized	○ Calculates accurately and work is labeled appropriately ○ Uses mathematical vocabulary correctly in writing or discussion ○ Written work is clear and organized	○ Precise solutions with correct labels ○ Communicates results with clear definitions, appropriate mathematical vocabulary and reasoning ○ Work is clear, organized and explanations carefully formulated
Looks for and makes use of structure	○ Does not recognize structure or determine patterns ○ Does not recognize that task may have multiple approaches	○ Recognizes simple structure or patterns in task ○ Recognizes that task may have multiple approaches	○ Recognizes structure and patterns and uses them to find solution ○ Recognizes that task may have multiple approaches but only pursues one pathway to solution	○ Finds multiple structures and patterns ○ Recognizes that task may have multiple approaches ○ Uses multiple structures and patterns to find more than one solution ○ Able to analyze a complication and turn it into several smaller tasks.
Looks for and expresses regularity in repeated reasoning <i>Uses efficient methods and short cuts when calculations are repeated</i>	○ Unable to find patterns that lead to generalizations	○ Able to find simple patterns that lead to generalizations	○ Able to find simple patterns that lead to generalizations ○ Student uses generalizations to find solution	○ Able to find patterns that lead to generalizations ○ Student uses generalizations to find solutions ○ Student uses generalizations to find short cuts

Great Task Class Checklist

Task Title:		MP 1: Make sense of problems and persevere in solving them	MP 2: Reason abstractly and quantitatively	MP 3: Construct viable arguments and critique the reasoning of others	MP 4: Model with mathematics	MP 5: Use appropriate tools strategically	MP 6: Attend to precision	MP 7: Look for and make use of structure	MP 8: Look for and express regularity in repeated reasoning	FINAL PINNACLE ENTRY
Trimester:										
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Assess Progress: **A** = advanced **M** = meeting **P** = progressing **NM** = not meeting