Grade K Section 3		
Activity	Everyday Mathematics Goal for Mathematical Practice	Guiding Questions
Activity 3-1 Num	ber Books	
Writing Numbers 0-10	GMP 2.1 Represent problems and situations mathematically with numbers, words, pictures,	How did you know how many objects to draw?  What goes in the picture box to show 0?
(Teacher's Guide to Activities, pages 138 and 139)	symbols, gestures, tables, graphs, and concrete objects.  See also: GMP 1.6, GMP 2.2, GMP 4.1, GMP 6.1	Why?*
Reviewing Color Patterns	<b>GMP 7.1</b> Find, extend, analyze, and create patterns.	Which pattern was the hardest to figure out? Why?
(Teacher's Guide to Activities, page 139)	See also: GMP 3.1	How do you figure out how to extend patterns?
<b>Activity 3-2 Maca</b>	roni Necklaces	
Making Macaroni Necklaces	<b>GMP 7.1</b> Find, extend, analyze, and create patterns.	How would you describe the pattern on your necklace?
	See also: GMP 3.1, GMP 3.2,	How is your pattern similar to or different from your classmates' patterns?
(Teacher's Guide to Activities, page 140)	GMP 6.1	
Estimating Pennies	GMP 3.1 Explain both what to do and why it works.  See also:	How did you estimate how many pennies were in the jar? Did the jar with 10 pennies help? If so, how?
(Teacher's Guide to Activities, page 141)	GMP 1.2, GMP 1.5, GMP 2.1, GMP 4.1, GMP 5.2, GMP 6.2	Which jar of pennies would you rather have? Why?

Activity 3-3 Roll and Record		
Graphing Dice	GMP 2.2 Explain the	What do the numbers on your graph stand
Rolls	meanings of the numbers,	for? What do the filled-in squares stand
	words, pictures, symbols,	for?
(Teacher's Guide	gestures, tables, graphs, and	
to Activities,	concrete objects you and	How does your graph show which number
pages 142 and	others use.	you rolled the most?
143)		
,	See also:	
	GMP 2.1, GMP 4.2,	
	GMP 6.1	
Continuing	GMP 4.1 Apply	Where do you see numbers in your daily
Number Books	mathematical ideas to real-	life?
	world situations.	
(Teacher's Guide		When and why do we write numbers?
to Activities,	See also:	
page 143)	GMP 2.1, GMP 2.2,	
	GMP 6.1	
<b>Activity 3-4 The I</b>	Pan Balance	
Introducing the	<b>GMP 5.2</b> Use mathematical	How do you use a pan balance to compare
Pan Balance	tools correctly and	weights?
	efficiently.	
(Teacher's Guide		Why or when might we want to
to Activities,		compare the weights of objects?
pages 144–146)	See also:	
	GMP 3.1, GMP 4.1,	
	GMP 5.3, GMP 8.3	
Playing Give the	<b>GMP 6.3</b> Be accurate when	How do you keep track of the numbers
Next Number	you count, measure, and	when it is not your turn?
	calculate.	
(Teacher's Guide		When have you needed to count
to Activities,	See also:	correctly in your daily life? Why was it
page 147)	GMP 2.1, GMP 3.2,	important to get the count right?
	GMP 4.1	
Activity 3-5 Domino Concentration Game		
Playing <i>Domino</i>	GMP 1.6 Connect	Can there be more than one domino card
Concentration	mathematical ideas and	that matches the same number card?
	representations to one	How?
	another.	
(Teacher's Guide		How are the domino cards and number
to Activities,	See also:	cards the same? How are they different?
pages 148 and	GMP 2.1, GMP 2.2	
149)		

Continuing Number Books (Teacher's Guide to Activities, page 149)	GMP 1.6 Connect mathematical ideas and representations to one another.  See also: GMP 2.1, GMP 2.2, GMP 4.1, GMP 6.3	Could you use dominoes to show the number on each page? How?  Compare your page for one of the numbers with someone else's page for the same number. What is the same about them? What is different?	
Activity 3-6 Mons	ter Squeeze Game		
Playing <i>Monster</i>	GMP 1.3 Try different	How do you use the answers to old	
Squeeze	approaches when your problem is hard.	guesses to make a new guess?	
		What can you do if you feel frustrated	
(Teacher's Guide	See also:	when doing math?	
to Activities,	GMP 1.2, GMP 8.3		
pages 150 and 151)			
Telling and	GMP 1.5 Check whether	How can you check your answer to a	
Drawing Number Stories	your solution makes sense.	number story problem?	
	See also:	Why is it important to check our	
(Teacher's Guide	GMP 1.1, GMP 1.2,	answers in math?	
to Activities,	GMP 1.4, GMP 1.6,		
page 151)	GMP 2.1, GMP 2.2, GMP 3.1, GMP 3.2,		
	GMP 4.1, GMP 4.2,		
	GMP 5.1, GMP 5.2,		
	GMP 5.3, GMP 6.1,		
	GMP 6.3		
<b>Activity 3-7 Meas</b>	Activity 3-7 Measurement with Objects		
Measuring with	<b>GMP 5.2</b> Use mathematical	How do you know if you have too few or	
Nonstandard	tools correctly and	too many cubes (or another material)	
Units	efficiently.	when you measure?	
	See also:	Are cubes (or another material) a good	
(Teacher's Guide	GMP 4.1, GMP 5.1,	tool for measuring every object? Why	
to Activities,	GMP 6.1, GMP 6.2,	or why not?	
pages 152 and 153)	GMP 6.3		

GMP 2.2 Explain the meanings of the numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects you and others use.	What do the numbers in your book stand for?  How are numbers like letters? How are they different from letters?		
See also: GMP 1.6, GMP 2.1, GMP 4.1, GMP 6.3			
et Problems			
<b>GMP 1.5</b> Check whether your answer makes sense.	How can you check your answer to a pocket problem?		
See also: GMP 1.1, GMP 1.2, GMP 1.4, GMP 1.6, GMP 2.1, GMP 2.2, GMP 3.1, GMP 4.1, GMP 6.3, GMP 7.1, GMP 7.2	What can you do if your answer doesn't seem to make sense?		
GMP 2.1 Represent problems and situations mathematically with numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects.  See also: GMP 2.2, GMP 4.2	How does the <i>Dice Race</i> chart (or Dice Roll graph) help you keep track of the numbers you rolled?  How could you do the activity without the chart or graph?		
Activity 3-9 Number Card Games			
	How did you put your cards in numerical		
structures to solve problems.	order?		
See also: GMP 3.1, GMP 6.3	Is it easier to find numbers when they are mixed up or in order? Why?		
	meanings of the numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects you and others use.  See also: GMP 1.6, GMP 2.1, GMP 4.1, GMP 6.3  Et Problems  GMP 1.5 Check whether your answer makes sense.  See also: GMP 1.1, GMP 1.2, GMP 1.4, GMP 1.6, GMP 2.1, GMP 2.2, GMP 3.1, GMP 4.1, GMP 6.3, GMP 7.1, GMP 7.2  GMP 7.2  GMP 2.1 Represent problems and situations mathematically with numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects.  See also: GMP 2.2, GMP 4.2  Der Card Games GMP 7.2 Use patterns and structures to solve problems.  See also: See also: GMP 7.2 Use problems.		

Continuing Number Books (Teacher's Guide to Activities, page 159)	GMP 6.3 Be accurate when you count, measure, and calculate.  See also: GMP 1.6, GMP 2.1, GMP 2.2, GMP 4.1	How do you check that you drew the correct number of pictures on each page?  Why is it important to count carefully (accurately)?
<b>Activity 3-10 Prol</b>	bability Stories	
Thinking about Probability: Can Pigs Fly?	GMP 3.1 Explain both what to do and why it works.  See also: GMP 3.2, GMP 4.1,	What is an example of something that is <i>likely</i> to happen today? Why is it likely? Do others agree?  What is something that is <i>unlikely</i> to
(Teacher's Guide to Activities, pages 160 and 161)	GMP 6.1	happen today? Why is it unlikely? Do others agree?
Creating Shape Art	GMP 6.1 Communicate your mathematical thinking clearly and precisely.	How would you describe one of the shapes or pictures you made?
(Teacher's Guide to Activities, page 161)	See also: GMP 1.4, GMP 2.1, GMP 4.1	How could you describe a shape if you don't know its name?
<b>Activity 3-11 Prol</b>	bability Tray	
Using a Probability Tray	GMP 1.1 Work to make sense of your problem.  See also:	What color do you think you will pick? Why? How sure are you?*
(Teacher's Guide to Activities, pages 162 and 163)	GMP 1.2, GMP 2.1, GMP 2.2, GMP 3.1, GMP 6.1, GMP 7.2	Is it certain, possible, or impossible it will be blue? Red?* Why do you think that?
Creating Shape Art	GMP 4.1 Apply mathematical ideas to realworld situations.	Could you use the shapes to make a picture of something in the real world?
(Teacher's Guide to Activities, page 163)	See also: GMP 1.4, GMP 2.1	What are some examples of shapes in our environment?

Activity 3-12 Pan Balance 2: Leveling		
Balancing Objects with Clay  (Teacher's Guide to Activities, pages 164 and 165)	GMP 5.2 Use mathematical tools correctly and efficiently.  See also: GMP 1.4, GMP 3.1, GMP 6.1	How did you make your pan balance level? How do you know whether to add (or take away) clay?  What mistakes might someone make when using a pan balance?
Playing Count and Sit (Teacher's Guide to Activities, page 165)	GMP 7.2 Use patterns and structures to solve problems.  See also: GMP 6.3, GMP 7.1	How does the game change as more people sit down?  Can you figure out who will be the last one standing? How?
Activity 3-13 Tra Playing Train Games  (Teacher's Guide to Activities, pages 166 and 167)	GMP 2.1 Represent problems and situations mathematically with numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects.  See also: GMP 1.1, GMP 1.4, GMP 3.1, GMP 6.3, GMP 7.2, GMP 8.1	How do you figure out how many more you need to get up to 10 (or down to 0)?  What are different combinations of rolls you can get to finish the game?
Finding I Spy Patterns  (Teacher's Guide to Activities, page 167)	GMP 6.2 Use the level of precision you need for your problem.  See also: GMP 4.1, GMP 6.1, GMP 7.1	What clues could you give so you do not give away the pattern too quickly?  What clues could you give to help us find the pattern if we have trouble?

Activity 3-14 Fav	orite Colors Graph	
Graphing Favorite Colors  (Teacher's Guide to Activities, pages 168 and 169)	GMP 4.2 Use mathematical models such as graphs, drawings, tables, symbols, numbers, and diagrams to solve problems.  See also: GMP 1.2, GMP 2.1, GMP 2.2, GMP 4.1, GMP 6.1, GMP 8.3	How can we show this [favorite color] information on paper?*  What else could you show in a bar graph?
Measuring with Objects  (Teacher's Guide to Activities, page 169)	GMP 2.2 Explain the meanings of the numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects you and others use.  See also: GMP 2.1, GMP 3.1, GMP 5.2, GMP 6.1, GMP 6.3	How did you use pictures, numbers, or other ways to record your measurements?  Why might we want to record our measurements in these ways?
Activity 3-15 Cou	ent by 10s	
Counting by 10s  (Teacher's Guide to Activities, pages 170 and 171)	GMP 8.1 Use patterns and structures to create and explain rules and shortcuts.  See also: GMP 2.1, GMP 2.2, GMP 4.1, GMP 5.1, GMP 6.3, GMP 7.1, GMP 8.2	Why is it faster to count the fingers by 10s than by 1s? When else might you count by 10s?  How many children do we need to have 40 (or another number) fingers? How did you figure that out?
Solving Pocket Problems  (Teacher's Guide to Activities, page 171)	GMP 7.1 Find, extend, analyze, and create patterns.  See also: GMP 1.1, GMP 1.2, GMP 1.5, GMP 1.6, GMP 2.1, GMP 2.2, GMP 3.1, GMP 4.1, GMP 6.3, GMP 7.2, GMP 8.1	What do you notice about the total number of objects each time we <i>add</i> to our pocket?  What do you notice about the total number of objects each time we <i>subtract</i> (take away) from the objects in the pocket?

Activity 3-16 Teen	Activity 3-16 Teen Frame Game		
Playing Teen	<b>GMP 8.1</b> Use patterns and	If you always fill up the ten boxes in the	
Frame	structures to create and explain rules and shortcuts.	top row, how do you know how many to put in the bottom row?	
(Teacher's Guide			
to Activities, pages 172 and 173)	See also: GMP 1.5, GMP 1.6, GMP 2.1, GMP 2.2, GMP 3.1, GMP 3.2	Why or when might it be helpful to think of teen numbers as "10 and some more"? Are there other numbers you can think of in similar ways? How might you make a gameboard for them?	
Choosing from a	<b>GMP 6.1</b> Communicate your	Explain why it is likely or unlikely that	
Probability Tray	mathematical thinking clearly and precisely.	the next counter chosen will be red (or another color).	
(Teacher's Guide			
to Activities,	See also:	If I add more red (or blue) counters, will it	
page 173)	GMP 1.1, GMP 1.2,	be more or less likely that I will choose a	
	GMP 2.1, GMP 2.2,	red (or blue)?	
	<b>GMP 3.1, GMP 7.2</b>		

<sup>\*</sup>denotes a question that is currently in the  $Everyday\ Mathematics\ materials$ 

Grade K Section 4		
Activity	Everyday Mathematics	<b>Guiding Questions</b>
	Goal for Mathematical Practice	
<b>Activity 4-1 Number Lin</b>	ne Mathematics	
Counting Steps on the Number Line  (Teacher's Guide to Activities, pages 188 and 189)	GMP 1.6 Connect mathematical ideas and representations to one another.  See also: GMP 2.1, GMP 2.2, GMP 5.2	How is the walk-on number line like our Growing Number Line?  How is a number line helpful?
Exploring Pattern Blocks (Teacher's Guide to Activities, page 189)	GMP 7.1 Find, extend, analyze, and create patterns.  See also: GMP 6.1	Do all the shapes with the same number of sides look the same? How are they the same and different?  How else are the pattern blocks the same? Can you make groups of blocks that are alike?
Activity 4-2 Top-It Card	Games	
Playing Top-It  (Teacher's Guide to Activities, pages 190 and 191)	GMP 5.1 Choose appropriate tools for your problem.  See also: GMP 2.2, GMP 3.1	How do you know which of two numbers is higher?*  If you aren't sure, what tools could help you decide which number is higher? What tools wouldn't be helpful for this?
Skip Counting by 10s (Teacher's Guide to Activities, page 191)	GMP 7.2 Use patterns and shortcuts to solve problems.  See also: GMP 3.1, GMP 6.3, GMP 7.1, GMP 8.1, GMP 8.2	How is <i>Give the Next Number</i> different when we count by 10s than when we count by 1s? Why is it like that?  Can anyone figure out how high we will get if we stop after everyone gets one turn?

<b>Activity 4-3 The Pattern</b>	-Block Template	
The Pattern-Block	GMP 5.2 Use	What do you think the Pattern-
Template	mathematical tools	Block Template might be used
	correctly and	for?*
(Teacher's Guide to	efficiently.	
Activities, pages 192		How is a pattern-block template
and 193)	See also:	helpful?
·	<b>GMP 1.6, GMP 2.1,</b>	
	GMP 7.1	
Solving Pocket	<b>GMP 8.1</b> Use patterns	How does the number of objects
Problems	and structures to create	in the pocket change when I add
	and explain rules and	to the pocket?
(Teacher's Guide to	shortcuts.	
Activities, page 193)		Why does the number in the
	See also:	pocket always get bigger when I
	<b>GMP 1.1, GMP 1.2,</b>	add to the pocket?
	<b>GMP 1.5, GMP 1.6,</b>	_
	GMP 2.1, GMP 2.2,	
	GMP 3.1, GMP 4.1,	
	<b>GMP 6.3, GMP 7.1,</b>	
	GMP 7.2	
<b>Activity 4-4 The Addition</b>	on Symbol (+)	
Joining Objects Using	<b>GMP 2.2</b> Explain the	If you have a + between two
the Addition Symbol	meanings of the	numbers, what does it tell you to
	numbers, words,	do?
(Teacher's Guide to	pictures, symbols,	
Activities, pages 194	gestures, tables, graphs,	What does the addition symbol
and 195)	and concrete objects	(+) mean? What words or
	you and others use.	pictures or gestures could we
		use if we didn't know that
	See also:	symbol?
	<b>GMP 1.6, GMP 2.1,</b>	
	GMP 4.1, GMP 6.1,	
	GMP 6.3, GMP 7.1	
Creating Pattern Strips	GMP 7.1 Find, extend,	Compare your pattern to one that
	analyze, and create	someone else made. How are the
(Teacher's Guide to	patterns.	patterns alike? How are they
Activities, page 195)		different?
	See also:	
	GMP 1.6, GMP 2.1,	How are these patterns like the
	GMP 3.2, GMP 5.2	patterns you made with
	<u></u>	macaroni? How are they
		different?

Activity 4-5 Follow My	Pattern	
Creating and Extending Pattern-Block Patterns	GMP 3.2 Work to make sense of others' mathematical thinking.	How do you figure out a partner's pattern? What do you do if you can't figure it out?
(Teacher's Guide to Activities, pages 196 and 197)	See also: GMP 1.3, GMP 6.1, GMP 7.1, GMP 7.2	What might make some patterns hard to figure out?
Estimating Objects in a Collection  (Teacher's Guide to Activities, page 197)	GMP 6.2 Use the level of precision you need for your problem.  See also: GMP 1.2, GMP 1.5, GMP 2.1, GMP 3.1, GMP 4.1, GMP 5.2	Based on your estimate, do you think there are enough raisins (or other item) for everyone in the class to have at least one? How sure are you?  Based on your estimate, do you think there are enough raisins (or other item) for everyone in the class to have 10? How sure are you?
<b>Activity 4-6 Interrupted</b>	Counts	
Counting from Different Numbers  (Teacher's Guide to	GMP 5.1 Choose appropriate tools for your problem.	Which tools in our classroom can help you count? How do you decide which tool to use?
Activities, page 198)	See also: GMP 1.6, GMP 6.3	Do you always need a tool to help you count?
Graphing Dice Rolls  (Teacher's Guide to Activities, page 199)	GMP 4.2 Use mathematical models such as graphs, drawings, tables, symbols, numbers, and diagrams to solve problems.  See also: GMP 2.1, GMP 2.2, GMP 6.1	How does your graph help you do the activity?  When else might you use a chart or a graph to help you keep track of something?

Activity 4-7 Meet the Calculator			
Exploring Calculators	GMP 5.2 Use	Why do you think the	
	mathematical tools	calculator only has numeral	
(Teacher's Guide to	correctly and	keys for 0–9? How can we	
Activities, pages	efficiently.	display 10 on the calculator?*	
200–202)		How can we display other 2-	
	See also:	digit numbers?	
	GMP 2.1, GMP 4.1		
		Why does the calculator have a	
		clear key?	
Playing Teen Frame	GMP 1.6 Connect	How or where is the 10 in your	
	mathematical ideas and	number model shown on your	
(Teacher's Guide to	representations to one	Teen Frame? How about the other	
Activities, page 202)	another.	numbers in your number model?	
	G 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	See also:	How does your number model	
	GMP 2.1, GMP 2.2	connect with your Teen Frame?	
Activity 4-8 Roll and Re	cord with Two Dice		
Graphing Sums of Dice	GMP 4.2 Use	Why do you think that 7 (or a	
Graphing Bains of Bree	mathematical models	different frequently-appearing	
(Teacher's Guide to	such as graphs,	number) came up more often than	
Activities, pages 204	drawings, tables,	2 (or 12)?	
and 205)	symbols, numbers, and		
	diagrams to solve	Which number do you think	
	problems.	would win if we did the activity	
	1	again? Why?	
	See also:		
	<b>GMP 2.1, GMP 2.2,</b>		
	GMP 5.1, GMP 5.2,		
	<b>GMP 6.1, GMP 7.2</b>		
T 11 G1	CI C		
Feeling Shapes	GMP 3.1 Explain both	Without looking at a shape (just	
(T 1 ) . C . 1 .	what to do and why it	by feeling it), explain how you	
(Teacher's Guide to	works.	know which one it is.	
Activities, page 205)	C1	Could way be some a start and	
	See also:	Could you be wrong about your	
	GMP 3.2, GMP 6.1,	guess? Why or why not?	
	GMP 7.1, GMP 7.2		

Activity 4-9 Body and R	Rope Shapes	
Making Shapes	GMP 1.2 Make a plan	How did your group plan before
	for solving your	you started making the shape?
(Teacher's Guide to	problem.	Would you change your plan for a
Activities, pages 206		different shape?
and 207)	See also:	_
	<b>GMP 1.1, GMP 1.3,</b>	How might having a plan help
	<b>GMP 1.4, GMP 1.6,</b>	you solve problems?
	<b>GMP 2.1, GMP 3.2,</b>	
	<b>GMP 6.1, GMP 7.1,</b>	
	GMP 7.2	
Making Symmetrical	GMP 4.1 Apply	Have you ever noticed symmetry
Snowflakes	mathematical ideas to	in a real snowflake or in
	real-world situations.	something else in nature?
(Teacher's Guide to		
Activities, page 207)	See also:	How do you know if an object
	<b>GMP 3.1, GMP 6.1,</b>	you find is symmetrical?
	GMP 7.1	
<b>Activity 4-10 Shape Con</b>	nparisons	
Comparing Shapes	<b>GMP 8.1</b> Use patterns	Is this still a triangle? Why or
	and structures to create	why not?*
(Teacher's Guide to	and explain rules and	
Activities, pages 208	shortcuts.	Are both of these triangles?
and 209)		Why or why not? How are they
	See also:	the same? How are they
	GMP 3.1, GMP 6.1,	different?*
	GMP 7.1, GMP 7.2	
Sorting Names	<b>GMP 1.4</b> Solve your	How many different ways can we
	problem in more than	sort the names?
(Teacher's Guide to	one way.	
Activities, page 209)		Why (or when) might we want
	See also:	to sort things (toys, clothes,
	GMP 7.1	words, etc.) in different ways?
<b>Activity 4-11 The Subtr</b>	action Symbol (-)	
Removing Objects	GMP 2.2 Explain the	If you have a – between two
Using the Subtraction	meanings of the	numbers, what does it tell you to
Symbol	numbers, words,	do?
	pictures, symbols,	
(Teacher's Guide to	gestures, tables, graphs,	What does the subtraction
Activities, pages 210	and concrete objects	symbol (-) mean? What words
and 211)	you and others use.	or pictures or gestures could we
·		use if we didn't know that
	See also:	symbol?
	GMP 1.6, GMP 2.1,	
	GMP 4.1, GMP 6.1,	
	GMP 6.3, GMP 7.1	

Practicing Number Writing  (Teacher's Guide to Activities, page 211)	GMP 1.6 Connect mathematical ideas and representations to one another.  See also: GMP 2.1, GMP 6.1	What do these numerals we are writing have to do with counting or adding or subtracting?  Why is it helpful to know how to write numbers correctly?
Activity 4-12 Slate Activ	vities	
Using Slates (Teacher's Guide to Activities, pages 212 and 213)	GMP 6.1 Communicate your mathematical thinking clearly and precisely.  See also: GMP 2.1, GMP 2.2, GMP 5.1, GMP 5.2	How does writing our answers on slates help us communicate our math thinking?  What other ways or tools could we use to communicate our thinking?
Measuring with Objects (Teacher's Guide to Activities, page 213)	GMP 3.1 Explain both what to do and why it works.  See also: GMP 2.1, GMP 2.2, GMP 5.2, GMP 6.1, GMP 6.3	How do you use the connecting cubes (or other object) to measure? Why does that work?  Could we measure with any other materials? Why or why not?
Activity 4-13 Introducti	on to Attribute Blocks	
Exploring Attribute Blocks (Teacher's Guide to	GMP 7.1 Find, extend, analyze, and create patterns.	What do you notice about the blocks that might help us sort them?
Activities, pages 214 and 215)	See also: GMP 1.4, GMP 6.1, GMP 7.2	Why (or when) is it helpful to sort things?
Counting On from Different Numbers	GMP 6.3 Be accurate when you count, measure, and calculate.	What is tricky about counting on from different numbers?
(Teacher's Guide to Activities, page 215)	See also: GMP 5.1, GMP 7.1, GMP 7.2	What kinds of things (e.g., tools, patterns, etc.) help you when you count so you don't make mistakes?

Activity 4-14 "What's My Rule?" Fishing Game		
Fishing for Children  (Teacher's Guide to Activities, page 216)	GMP 8.1 Use patterns and structures to create and explain rules and shortcuts.  See also: GMP 1.1, GMP 1.5, GMP 7.1, GMP 7.2, GMP 8.1	What is my fishing rule?*  How did you figure out my fishing rule? What helped you figure out the rule?
Playing I Spy with Shapes  (Teacher's Guide to Activities, page 217)	GMP 3.2 Work to make sense of others' mathematical thinking.  See also: GMP 6.1, GMP 7.2, GMP 8.1	What clues help you figure out the mystery object? Are there particular words that are helpful?  What questions would you want to ask me if I wasn't giving good clues?
A atimitar A 15 Normals are C	tarias Stara 2	
Activity 4-15 Number S Relating Symbols to Number Stories  (Teacher's Guide to Activities, pages 218 and 219)	GMP 1.1 Work to make sense of your problem.  See also: GMP 1.5, GMP 1.6, GMP 2.1, GMP 2.2, GMP 4.1, GMP 5.1, GMP 5.2, GMP 6.3	Was anything put together in the story? Was anything taken away? Did we end up with more or fewer than we started with?*  What strategies do you use to figure out if something is a "joining" story or a "takeaway" story?
Counting by 10s  (Teacher's Guide to Activities, page 219)	GMP 7.2 Use patterns and structures to solve problems.  See also: GMP 3.1, GMP 6.3, GMP 7.1, GMP 8.1, GMP 8.2	How is <i>Count and Sit</i> different when we count by 10s than when we count by 1s? Why is it like that?  Can anyone figure out who will sit down next before we start counting? How?

Activity 4-16 Two-Digit Numbers		
Reading 2-Digit	GMP 2.2. Explain the	How are the numbers 38 and 83
Numbers	meanings of the	the same? How are they different?
Numbers	numbers, words,	the same: How are they different:
(Tagahaw'a Cuida ta	· · ·	How are 2 digit numbers
(Teacher's Guide to	picture, symbols,	How are 2-digit numbers
Activities, pages 220	gestures, tables, graphs,	different from
and 221)	and concrete objects	1-digit numbers?
	you and others use.	
	See also:	
	GMP 2.1, GMP 6.1,	
	<b>GMP 6.3, GMP 7.1,</b>	
	<b>GMP 7.2, GMP 8.2</b>	
Describing Probability	<b>GMP 7.2</b> Use patterns	Which color block do you think
	and structures to solve	you are most (or least) likely to
(Teacher's Guide to	problems.	choose?
Activities, page 221)	1	
	See also:	How do you use the blocks on the
	<b>GMP 1.1, GMP 1.2,</b>	tray to make your prediction?
	<b>GMP 2.1, GMP 2.2,</b>	_
	GMP 3.1, GMP 6.1	

<sup>\*</sup>denotes a question that is currently in the *Everyday Mathematics* materials

Grade K Section 5		
Activity	Everyday Mathematics Goal for Mathematical Practice	Guiding Questions
Activity 5 1 Order of D		
Activity 5-1 Order of D	Ţ	Wiles de la companie de l'accellant de la companie
Sequencing Daily Events	GMP 2.1 Represent problems and situations mathematically with	What does your timeline show about your day?
(Teacher's Guide to Activities, pages 236 and 237)	numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects.	What others things can you put in order?
	See also: GMP 2.2, GMP 4.1	
Playing the <i>Growing</i> and Disappearing Train Game	GMP 2.2 Explain the meanings of the numbers, words,	What happens to your train when you roll a green (+)? Why?
(Teacher's Guide to Activities, page 237)	pictures, symbols, gestures, tables, graphs, and concrete objects you and others use.	What happens to your train when you roll a red (–)? Why?
	See also: GMP 1.6, GMP 2.1, GMP 6.3, GMP 7.2, GMP 8.1	
Activity 5-2 Patterns wi	ith Craft Sticks	
Making Craft-Stick Patterns (Teacher's Guide to	GMP 7.1 Find, extend, analyze, and create patterns.	How are craft-stick patterns the same as other patterns you have made?
Activities, page 238)	See also: GMP 2.1, GMP 6.1, GMP 3.2	How are craft-stick patterns different from other patterns you have made?
Looking Ahead to the 100 <sup>th</sup> Day	GMP 1.5 Check whether your solution makes sense.	How could you make sure you have 100 objects in your "100 collection"?
(Teacher's Guide to Activities, page 239)	See also: GMP 6.3, GMP 7.2	What are different ways to count to 100?

Activity 5-3 Find the Bl	ock Game	
Playing <i>Find the Block</i>	<b>GMP 8.2</b> Use	Why did you sit down (or remain
	properties, rules, and	standing) after that clue?
(Teacher's Guide to	shortcuts to solve	
Activities, pages 240	problems.	
and 241)		What are all the attributes we need
,	See also:	to know to discover the mystery
	GMP 3.1, GMP 3.2,	block?
	GMP 6.1, GMP 7.2	
Using Slates to Practice	GMP 6.1	What do you notice about the
Writing 2-Digit	Communicate your	number right before (or after) a
Numbers	mathematical thinking	given number?
	clearly and precisely.	
(Teacher's Guide to		What happens to a number if
Activities, page 241)	See also:	you switch the order of the
	GMP 2.1, GMP 2.2,	digits?
	GMP 7.1, GMP 7.2	8
	,	
Activity 5-4 Guess My N	Number Game	
Playing Guess My	GMP 2.2 Explain the	What other clues could describe
Number	meanings of the	this number?*
	numbers, words,	
(Teacher's Guide to	pictures, symbols,	Why is it good to be able to
Activities, pages 242	gestures, tables, graphs,	describe numbers in so many
and 243)	and concrete objects	different ways?
,	you and others use.	·
	See also:	
	GMP 1.1, GMP 1.4,	
	GMP 2.1, GMP 3.1,	
	GMP 3.2, GMP 6.1	
	,	
Using Pan Balances	GMP 2.1 Represent	How can you use drawings to
	problems and situations	show what you found using the
(Teacher's Guide to	mathematically with	pan balance?
Activities, page 243)	numbers, words,	
,	pictures, symbols,	Why is it important to write and
	gestures, tables, graphs,	draw your findings?
	and concrete objects.	
	See also:	
	<b>GMP 2.2, GMP 3.1,</b>	
	<b>GMP 5.2, GMP 6.1,</b>	
	GMP 6.3	

Activity 5-5 Count with	Calculators	
Counting Forward and	GMP 5.2 Use	Why do you press the ON/C or
Backward with a	mathematical tools	AC button before you enter a new
Calculator	correctly and	number?
	efficiently.	
(Teacher's Guide to		Why (or when) might you want
Activities, pages 244	See also:	to use a calculator for counting
and 245)	GMP 1.6, GMP 2.2,	up or back?
,	GMP 7.1, GMP 8.1	
	,	
Playing Monster	GMP 8.3 Reflect on	How do you use the answers to old
Squeeze	your thinking before,	guesses to make a new guess?
	during, and after you	
(Teacher's Guide to	solve a problem.	How does <i>Monster Squeeze</i> help
Activities, page 245)		us learn to solve problems?
	See also:	1
	GMP 1.2, GMP 1.3,	
	GMP 3.1	
<b>Activity 5-6 Measurem</b>	ent with Children's Feet	
Measuring with Feet	<b>GMP 6.3</b> Be accurate	Why is it important to "mark off"
	when you count,	when you measure?
(Teacher's Guide to	measure, and calculate.	
Activities, pages 246		How else can you make sure you
and 247)	See also:	measure accurately?
	GMP 5.2	-
Playing <i>Top-It</i>	GMP 5.1 Choose	How do you know which of two
	appropriate tools for	numbers is greater?
(Teacher's Guide to	your problem.	
Activities, page 247)		If you aren't sure, what tools could
	See also:	help you decide which number is
	GMP 2.2, GMP 3.1,	greater? What tools would not be
	GMP 7.2	helpful for this?
Activity 5-7 How Big Is		
Reading and	GMP 5.3 Estimate and	Why did the bed in the story turn
Discussing How Big Is	use what you know to	out to be the wrong size? How do
a Foot?	check the answers you	you think they could have
	find using tools.	prevented this problem?
(Teacher's Guide to		
Activities, pages 248	G 1	What is different about
and 249)	See also:	measuring with a child's foot
	GMP 3.1, GMP 5.1,	and a standard foot? Why
	GMP 5.2, GMP 6.1,	should you always pay attention
	GMP 6.2, GMP 6.3	to the unit you are measuring
		with?

Counting by 10s  (Teacher's Guide to Activities, page 249)	GMP 7.2 Use patterns and structures to solve problems.  See also: GMP 3.1, GMP 5.1, GMP 6.3, GMP 7.1, GMP 8.1	What number comes after 100 when you count by 10s?  How could you use the counting by 10s patterns to count by 10s past 100?
Activity 5-8 Count by 5		
Counting by 5s  (Teacher's Guide to Activities, pages 250 and 251)	GMP 4.1 Apply mathematical ideas to real-world situations.  See also: GMP 5.2, GMP 7.1, GMP 8.1	Can you think of things that come in groups of five?*  Do you think it would be faster to count a large number of objects by 5s or by 1s?*
Graphing Sums of Dice Throws  (Teacher's Guide to Activities, page 251)	GMP 1.4 Solve your problem in more than one way.  See also: GMP 2.1, GMP 2.2, GMP 4.2, GMP 5.1, GMP 5.2, GMP 7.2	How did you figure out your sums? Could you figure them out in other ways?  Do you use different strategies for different dice combinations? How do you decide which strategy to use?
Activity 5-9 Introduction	n of Tally Marks	
Activity 5-9 Introduction Introducing and Using Tally Marks  (Teacher's Guide to Activities, pages 252 and 253)	GMP 2.2 Explain the meanings of the numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects you and others use.  See also: GMP 2.1, GMP 4.1, GMP 4.2, GMP 6.3	What does each tally mark stand for on our transportation tally chart?  When have you seen tally marks being used? When else might we use tally marks?

Making Equivalent Names for Numbers (Teacher's Guide to Activities, page 253)	GMP 2.1 Represent problems and situations mathematically with numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects.  See also: GMP 1.1, GMP 1.4, GMP 2.2, GMP 3.1, GMP 3.2, GMP 6.1	How many different ways can we show (represent) this number?  Why is it good to be able to describe numbers in so many different ways?
Activity 5-10 The Raft (	,	
Playing The Raft Game  (Teacher's Guide to	GMP 6.3 Be accurate when you count, measure, and calculate.	How did you know you could trade for a raft (or plank) just then?
Activities, pages 254 and 255)	See also: GMP 1.1, GMP 1.6, GMP 3.1, GMP 7.2	Why is it important to count your beans carefully?
Estimating Beans (Teacher's Guide to Activities, page 255)	GMP 1.5 Check whether your solution makes sense.  See also: GMP 1.2, GMP 3.1, GMP 4.1	How do you try to make a "pretty close" estimate?  What can you do to get better at making "pretty close" estimates?
Activity 5-11 Standard		
Measuring and Comparing (Teacher's Guide to	GMP 4.1 Apply mathematical ideas to real-world situations.	Why are the measurements different depending on the foot you use?
Activities, pages 256 and 257)	See also: GMP 3.1, GMP 5.1, GMP 5.2, GMP 5.3, GMP 6.1, GMP 6.2, GMP 6.3	Do you think it is good that there is a standard foot for measuring? Why or why not? When might it be important?
Counting by 1s  (Teacher's Guide to Activities, page 257)	GMP 6.3 Be accurate when you count, measure, and calculate.	How can you use what you know about number patterns to predict the next number when you get to numbers like 29, 39, and 49?
	See also: GMP 3.1, GMP 6.1, GMP 7.1, GMP 7.2, GMP 8.1	When do you need to count correctly in your life?

<b>Activity 5-12 Tools for </b>	Measuring Length	
Measuring with Different Tools  (Teacher's Guide to Activities, pages 258 and 259)	GMP 5.1 Choose appropriate tools for your problem.  See also: GMP 5.2, GMP 5.3, GMP 6.2, GMP 6.3	Why did you choose that tool to measure your object?  Why do we have different tools for measuring things?
Playing Domino Concentration  (Teacher's Guide to Activities, page 259)	GMP 1.6 Connect mathematical ideas and representations to one another.  See also: GMP 1.2, GMP 1.3, GMP 1.4, GMP 2.1, GMP 2.2, GMP 8.3	Is there more than one domino that can match each number card? Why or why not?  Is there more than one number card that can match each domino? Why or why not?
Activity 5-13 Pet Bar G	raph	
Graphing Pets  (Teacher's Guide to Activities, pages 260 and 261)	GMP 6.1 Communicate your mathematical thinking clearly and precisely.  See also: GMP 2.1, GMP 2.2, GMP 4.1, GMP 4.2	What is a good title for our graph? Why is it a good title? Why is it important to title and label our graph?
Following Craft-Stick Patterns  (Teacher's Guide to Activities, page 261)	GMP 7.1 Find, extend, analyze and create patterns.  See also: GMP 3.2, GMP 6.1	How would you describe your partner's pattern?*  How do you know if something is a pattern?
Activity 5-14 Attribute S	Spinner Game	
Playing the Attribute Spinner Game (Teacher's Guide to Activities, page 262)	GMP 6.2 Use the level of precision you need for your problem.  See also: GMP 8.2, GMP 8.3	How can we make sure we choose the correct block?  How does the game change when we add another spinner?

Tallying Class Data  (Teacher's Guide to Activities, page 263)	GMP 4.2 Use mathematical models such as graphs, drawings, tables, symbols, numbers, and diagrams to solve problems.  See also: GMP 2.1, GMP 2.2, GMP 4.1	Why did we use a tally chart to show which cookies we like?  What other information about our class could we show with a tally chart?
•	ion to the Number Grid	
Getting to Know the Class Number Grid  (Teacher's Guide to	GMP 3.1 Explain both what to do and why it works.	What do you notice about the Class Number Grid?* Why do you think it is organized this way?
Activities, pages 264 and 265)	See also: GMP 5.2, GMP 6.1, GMP 7.1, GMP 7.2, GMP 8.1, GMP 8.2, GMP 8.3	How did you figure out the hidden number(s)? Did any patterns help you?
Writing Number Models for Number Stories  (Teacher's Guide to Activities, page 265)	GMP 4.2 Use mathematical models such as graphs, drawings, tables, symbols, numbers, and diagrams to solve problems.  See also: GMP 1.1, GMP 1.2, GMP 1.5, GMP 1.6, GMP 2.1, GMP 2.2, GMP 4.1	How does your number model "match" the number story?  Can you retell the number story using the number model you wrote?
Activity 5-16 Number-C	Grid Search Game	
Playing Number-Grid Search (Teacher's Guide to Activities, pages 266 and 267)	GMP 7.2 Use patterns and structures to solve problems.  See also: GMP 3.2, GMP 6.1, GMP 8.1, GMP 8.2, GMP 8.3	How can the Searcher (or the Guide) use the patterns on the number grid to make a good guess (or give good clues)?  What are other ways we can use patterns on the number grid?

Playing the <i>Matching</i>	<b>GMP 6.2</b> Use the level	Do you need to count the coins to
Coin Game	of precision you need	know which tray has the most
	for your problem.	coins?
(Teacher's Guide to		
Activities, page 267)	See also:	Why or why not?
	GMP 6.3	

<sup>\*</sup>denotes a question that is currently in the  $Everyday\ Mathematics\ materials$ .

Grade K Section 6		
Activity	Everyday Mathematics Goal for Mathematical Practice	Guiding Questions
<b>Activity 6-1 Introduction</b>	n of the Penny	
Exploring the Penny  (Teacher's Guide to Activities, pages 282 and 283)	GMP 4.1 Apply mathematical ideas to real-world situations.  See also: GMP 2.1, GMP 2.2, GMP 6.1, GMP 6.3	What is money used for?*  Why do you think there are different kinds of money?*
Counting Steps on a Number Line (Teacher's Lesson Guide, page 283)	GMP 5.2 Use mathematical tools correctly and efficiently.  See also: GMP 1.6, GMP 2.1, GMP 2.2, GMP 4.2, GMP 6.3	How does the number line help you solve problems?  Which number line do you like to use: the walk-on number line or the wall number line? Why?
Activity 6-2 Introduction	n of the Nickel	
Exploring the Nickel  (Teacher's Guide to Activities, pages 284 and 285)	GMP 1.6 Connect mathematical ideas and representations to one another.  See also: GMP 2.1, GMP 2.2, GMP 4.1, GMP 6.3	Why is it fair to exchange five pennies for one nickel?  Can you think of other times we have traded or exchanged equivalent amounts?
Playing the Growing and Disappearing Train Game  (Teacher's Guide to Activities, page 285)	GMP 2.2 Explain the meanings of the numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects you and others use.  See also: GMP 1.5, GMP 2.1, GMP 3.1, GMP 6.3	How do you know whether to add or subtract cubes from your train?  What happens to your train when you roll the addition (or subtraction) symbol? Why?

Activity 6-3 Solid Shape	Museum	
Making a Shape Museum	GMP 6.1 Communicate your mathematical ideas clearly and precisely.	What do you notice about the shapes of these items?*
(Teacher's Guide to Activities, pages 286–288)	See also: GMP 4.1, GMP 7.1, GMP 7.2	How are these two shapes (any two) alike and different?*
Making Symmetrical Hearts and Other Designs	GMP 1.5 Check whether your solution makes sense.  See also:	How can you check to see if your shape is symmetrical?  Why is it important to check your work?
(Teacher's Guide to Activities, page 288)	GMP 1.3	work?
Activity 6-4 Counts to M		
Beating Out Time  (Teacher's Guide to Activities, pages 290 and 291)	GMP 8.3 Reflect on your thinking before, during, and after you solve a problem.  See also:	What number do you think we will get if we count faster while she walks?* Why?  What do you think would happen if we mixed slow and fast counting?*
Playing The Raft Game (Teacher's Guide to Activities, page 291)	GMP 2.1, GMP 2.2, GMP 3.1, GMP 5.1, GMP 6.2  GMP 7.2 Use patterns and structures to solve problems.  See also:	What counting patterns can you use to find out how many beans you have? Have you noticed anything else that might help you find your total number of beans?
	GMP 6.3, GMP 8.1, GMP 8.2	When else might it be helpful to use counting patterns?
Activity 6-5 Surveys and		
Graphing Survey Data  (Teacher's Guide to Activities, pages 292 and 293)	GMP 4.2 Use mathematical models such as graphs, drawings, tables, symbols, numbers, and diagrams to solve problems.	What questions could you ask that other people could answer using your graph?  Can you think of any other way you could have shown your results?
	See also: GMP 2.1, GMP 2.2, GMP 4.1, GMP 6.1	resurts:

Counting to the Number of the Day	GMP 7.1 Find, extend, analyze, and create	Can we get to the Number of the Day by counting only by 10s? Only
(T12-C1-4-	patterns.	by 5s? Only by 1s?
(Teacher's Guide to Activities, page 293)	See also:	Do you notice any similarities
Activities, page 293)	GMP 4.1, GMP 6.3,	Do you notice any similarities between counting by 5s and
	GMP 7.2, GMP 8.1	counting by 10s patterns? What
	GWI 7.2, GWI 6.1	are the differences in the
		patterns?
Activity 6-6 I Spy with S	Shapes	Posterior
Playing <i>I Spy</i> with	<b>GMP 8.2</b> Use properties,	Which clues helped you figure out
Shapes	rules, and shortcuts to	the shape/object I was thinking of?
	solve problems.	
(Teacher's Guide to	-	Were some shapes/objects harder to
Activities, pages 294	See also:	figure out than others? Why or why
and 295)	<b>GMP 6.1, GMP 7.2,</b>	not?
	GMP 8.1, GMP 8.3	
Making a "Number of	GMP 1.6 Connect	What can you learn from the
Pets" Graph	mathematical ideas and	"Types of Pets" graph (Activity 5-
	representations to one	13)? What can you learn from the
(Teacher's Guide to	another.	"Number of Pets" graph? How are
Activities, page 295)		these graphs the same and
	See also:	different?
	GMP 2.1, GMP 2.2,	
	GMP 4.1, GMP 4.2,	What other information could we
	GMP 6.1	collect and graph about pets?
		How would that graph compare to these two?
Activity 6.7 Introduction	n of the Dime	these two?
Activity 6-7 Introductio Exploring the Dime	GMP 7.2 Use patterns	How is counting dimes and pennies
Exploring the Diffic	and structures to solve	like counting to the Number of the
(Teacher's Guide to	problems.	Day on the number line?
Activities, pages 296	problems.	Buy on the number line.
and 297)	See also:	Why do you think we have coins
	GMP 1.6, GMP 2.1,	worth 1 cent, 5 cents, and
	GMP 4.1, GMP 7.1,	10 cents, but not worth 3 cents
	GMP 8.1, GMP 8.2	or 9 cents?
Playing the <i>Attribute</i>	<b>GMP 8.2</b> Use properties,	Can you look at someone's block
Spinner Game	rules, and shortcuts to	and tell what he or she spun on
	solve problems.	each spinner?
(Teacher's Guide to		
Activities, page 297)	See also:	How does the game change if you
	GMP 6.1, GMP 6.2,	play with more or fewer spinners?
	GMP 8.3	

Activity 6-8 Coin Exchanges			
Making Coin	GMP 1.4 Solve your	Can you make your exchange a	
Exchanges	problem in more than one	different way?	
	way.		
(Teacher's Guide to		How many different ways could	
Activities, pages 298	See also:	you exchange for a dime?	
and 299)	GMP 1.2, GMP 1.5,		
	<b>GMP 1.6, GMP 2.1,</b>		
	GMP 3.1, GMP 4.1,		
	GMP 6.3		
Playing Guess My	<b>GMP 3.2</b> Work to make	What questions could you ask to	
Number and Counting	sense of others'	figure out my number?	
Backward	mathematical thinking.		
		Why is listening carefully	
(Teacher's Guide to	See also:	important in math?	
Activities, page 299)	GMP 1.4, GMP 2.1,		
	GMP 2.2, GMP 3.1,		
	GMP 6.1		
Activity 6-9 Comparison			
Telling Comparison	<b>GMP 1.4</b> Solve your	How do the counters help us solve	
Stories	problem in more than one	these comparison stories?	
	way.		
(Teacher's Guide to		How else might you solve	
Activities, pages 300	See also:	comparison number stories?	
and 301)	GMP 1.2, GMP 1.5,		
	GMP 2.1, GMP 2.2,		
Managerina in Different	GMP 5.2, GMP 6.3	Wiles and an all and a little and a	
Measuring in Different	GMP 5.1 Choose	What other tool could you use to	
Ways	appropriate tools for your	measure your object?	
(Tagahan'a Cuida ta	problem.	Harry might way davids which tool	
(Teacher's Guide to		How might you decide which tool	
Activities, page 301)	See also:	to use to measure a particular	
	GMP 1.4, GMP 4.1,	object?	
	GMP 5.2, GMP 5.3,		
	GMP 6.1, GMP 6.3		
Activity 6-10 Count by 2s			
Counting by 2s	GMP 7.1 Find, extend,	What patterns do you notice when	
<i>G</i> - <i>J</i>	analyze, and create	we count by 2s?*	
(Teacher's Guide to	patterns.		
Activities, pages 302	•	How are these patterns like	
and 303)	See also:	counting by 5s (or 10s)? How are	
,	GMP 4.1, GMP 8.1	they different?	
	<u></u>		

Estimating Nickels or	<b>GMP 6.2</b> Use the level of	Why do we say "pretty close"
Dimes	precision you need for	instead of "exactly right" when we
	your problem.	describe our estimates?
(Teacher's Guide to		
Activities, page 303)	See also:	When might it be useful to
	GMP 1.2, GMP 1.5,	estimate?
	GMP 4.1, GMP 6.2,	
	GMP 8.3	
<b>Activity 6-11 Divide Gro</b>	oups in Half	
Dividing a Group into	GMP 4.1 Apply	When have you heard people use
Halves	mathematical ideas to	the word <i>half</i> ?*
	real-world situations.	
(Teacher's Guide to		When might you want or need to
Activities, pages 304	See also:	divide a group or collection
and 305)	GMP 2.1, GMP 2.2,	exactly in half?
	GMP 6.1, GMP 6.3	
Playing Teen Frame	GMP 2.1 Represent	How can you write the number in
and Top-It	problems and situations	your teen frame using the number
	mathematically with	model 10 +?
	numbers, words, pictures,	
(Teacher's Guide to	symbols, gestures, tables,	What do you notice about your
Activities, page 305)	graphs, and concrete	number models?
	objects.	
	See also:	
	GMP 1.6, GMP 2.2,	
1 11 11 C 40 D 11 C 1	GMP 7.1, GMP 7.2	
Activity 6-12 Read My M		***
Playing Read My Mind	GMP 3.2 Work to make	What attributes can you ask about
	sense of others'	to figure out the mystery block?
(Teacher's Guide to	mathematical thinking.	***
Activities, page 306)	G 1	Why is it important to listen
	See also:	carefully to all of the answers
	GMP 1.2, GMP 1.3,	during this game?
	GMP 1.5, GMP 6.1,	
Dlavina M	GMP 8.2, GMP 8.3	To it agains on to add as to 1
Playing Monster	GMP 1.6 Connect	Is it easier or harder to play
Squeeze	mathematical ideas and	Monster Squeeze without the
(T1-1)- C-1	representations to one	monsters? Why?
(Teacher's Guide to	another.	How one Dead My Mind and
Activities, page 307)	See also:	How are Read My Mind and
		Monster Squeeze similar? How are
	GMP 1.2, GMP 1.3,	they different?
	GMP 1.5, GMP 3.2,	
	GMP 8.3	

<b>Activity 6-13 Tools for I</b>	Measuring Time	
Timing Activities	GMP 5.1 Choose	When might we want to use tools
	appropriate tools for your	like clocks or stopwatches instead
(Teacher's Guide to	problem.	of counting?
Activities, pages 308		
and 309)	See also:	What other tools do you know
,	GMP 4.1, GMP 5.2,	about that keep track of time?
	GMP 5.3, GMP 6.2,	•
	GMP 6.3	
Playing Number-Grid	<b>GMP 7.2</b> Use patterns	Are the numbers on the Number
Search	and structures to solve	Grid always in the same places?
	problems.	
(Teacher's Guide to		What helps you find numbers
Activities, page 309)	See also:	quickly on the Number Grid?
	GMP 3.2, GMP 8.1,	
	GMP 8.2, GMP 8.3	
Activity 6-14 Skip Cour	,	
Skip Counting with	GMP 8.1 Use patterns	Why do you think this (+2) makes
Calculators	and structures to create	the calculator skip count by 2s?*
	and explain rules and	
(Teacher's Guide to	shortcuts.	How do you think you could make
Activities, pages 310		the calculator skip count by 5s (or
and 311)	See also:	10s)?
,	GMP 1.6, GMP 2.1,	,
	GMP 2.2, GMP 5.2,	
	GMP 7.1, GMP 8.2	
Making Coin Patterns	<b>GMP 7.1</b> Find, extend,	What pattern(s) do you see with
	analyze, and create	these coins? How could you
(Teacher's Guide to	patterns.	continue the pattern?
Activities, page 311)		
	See also:	How else could we use coins to
	GMP 1.4, GMP 3.2	make patterns?
	,	1
Activity 6-15 Symbolic	Representations of Patterns	S
Representing a Pattern	GMP 2.1 Represent	How did you use symbols to show
	problems and situations	your pattern?
(Teacher's Guide to	mathematically with	
Activities, pages 312	numbers, words, pictures,	Why (or when) might it be useful
and 313)	symbols, gestures, tables,	to represent patterns with
	graphs, and concrete	symbols?
	objects.	_
	_	
	See also:	
	GMP 1.6, GMP 2.2,	
	GMP 7.1	

Flipping a Coin	GMP 4.1 Apply	Why is a coin toss a fair way to
	mathematical ideas to	decide between two things?*
(Teacher's Guide to	real-world situations.	
Activities, page 313)		What kinds of things in the real
	See also:	world are (or could be) decided
	GMP 2.1, GMP 6.1,	by a coin toss?
	GMP 8.3	
Activity 6-16 Division of	Whole Objects into Halves	S
Dividing a Whole into	<b>GMP 1.2</b> Make a plan for	Why might you want to draw a
Halves	solving your problem.	dividing line before you actually
		break the cracker?
(Teacher's Guide to	See also:	
Activities, page 314)	GMP 1.6, GMP 2.1,	When else have you had to make
	GMP 2.2, GMP 3.2,	a plan to help you solve a
	GMP 4.1, GMP 6.1,	problem?
	GMP 6.3	
Writing Number	<b>GMP 1.1</b> Work to make	When you listen to a number story,
Models for Number	sense of your problem.	how do you decide how to solve it?
Stories		
	See also:	Does it help you to think about it as
(Teacher's Guide to	GMP 1.2, GMP 1.5,	joining or taking away? Why or
Activities, page 315)	GMP 2.1, GMP 2.2,	why not?
	GMP 3.1, GMP 6.3,	
	GMP 8.2, GMP 8.3	

<sup>\*</sup>denotes a question that is currently in the *Everyday Mathematics* materials.

Grade K Section 7		
Activity	Everyday Mathematics Goal for Mathematical Practice	<b>Guiding Questions</b>
Activity 7-1 Money Cub		
Playing Money Cube	GMP 1.4 Solve your	Can you make your exchange a
	problem in more than	different way?
(Teacher's Guide to	one way.	
Activities, page 330)	See also: GMP 1.2, GMP 1.5, GMP 1.6, GMP 4.1, GMP 6.3	How many different ways could you exchange for a nickel? A dime?
Counting to the	GMP 7.1 Find, extend,	Can we get to the last number on
Number of the Day	analyze, and create	the Growing Number Line when
	patterns.	we count by 2s? Why or why
(Teacher's Guide to		not?
Activities, page 331)	See also:	
	GMP 1.4, GMP 6.3	What will happen when we count
Activity 7.2 Class Calls		by 2s tomorrow?
Activity 7-2 Class Collecting Objects	GMP 1.4 Solve your	What are some different ways we
Concerning Objects	problem in more than	can count the items in our
(Teacher's Guide to	one way.	collection?
Activities, pages		
332–334)	See also:	What are some different ways we
,	<b>GMP 1.2, GMP 1.5,</b>	can show or keep track of how
	<b>GMP 2.1, GMP 2.2,</b>	many items we have collected?
	GMP 4.1, GMP 6.3	
Writing Number	GMP 2.2 Explain the	How does your number model
Models for Number	meanings of the	"match" the number story?
Stories	numbers, words,	
(T. 1 . G . I	pictures, symbols,	Can you retell the number story
(Teacher's Guide to	gestures, tables, graphs,	using the number model you
Activities, page 334)	and concrete objects	wrote?
	you and others use.	
	See also:	
	GMP 1.1, GMP 1.2,	
	GMP 1.5, GMP 1.6,	
	GMP 2.1, GMP 2.2,	
	GMP 4.1, GMP 4.2	

Activity 7-3 Class Number Story Book		
Creating Number Stories  (Teacher's Guide to Activities, pages 336–338)	GMP 3.2 Work to make sense of others' mathematical thinking.  See also: GMP 1.1, GMP 1.2, GMP 1.4, GMP 1.5, GMP 2.1, GMP 2.2, GMP 4.1, GMP 4.2, GMP 5.1, GMP 6.1	Look at a classmate's paper. Can you retell the number story from what you see?  Show your number story to a partner. Ask your partner to explain his or her strategy for solving your number story. Then switch roles.
Playing Shape Games  (Teacher's Guide to Activities, page 338)	GMP 8.2 Use properties, rules, and shortcuts to solve problems.  See also: GMP 4.1, GMP 6.1, GMP 7.2, GMP 8.1, GMP 8.3	How could you tell if I was thinking of a 2-dimensional or 3-dimensional shape?  Were some shapes/objects harder to figure out than others? Why or why not?
Activity 7-4 Marshmall	ow and Toothpick Shapes	<u> </u>
Making Geometric Shapes  (Teacher's Guide to Activities, page 340)	GMP 6.1 Communicate your mathematical thinking clearly and precisely.  See also: GMP 2.1, GMP 7.2, GMP 8.3	How would you describe your shape to someone who could not see it?  What 2-dimensional shapes did you use to make your structure?
Dividing Groups in Half  (Teacher's Guide to Activities, page 341)	GMP 3.1 Explain both what to do and why it works.  See also: GMP 1.2, GMP 1.5, GMP 2.1, GMP 6.1, GMP 6.3	How did you divide the set of marshmallows in half? How do you know it is in halves?  Why is it helpful to explain how you solved a problem?

<b>Activity 7-5 Introduction</b>	on of the Quarter	
Exploring the Quarter	GMP 1.4 Solve your	What are different ways we could
	problem in more than	count all our quarters?
(Teacher's Guide to	one way.	1
Activities, pages 342		How many different ways could
and 343)		you trade for a quarter?
	See also:	_
	GMP 1.5, GMP 1.6,	
	<b>GMP 7.2, GMP 8.1,</b>	
	GMP 8.2, GMP 8.3	
Graphing Sums of	<b>GMP 8.1</b> Use patterns	How many different ways can you
Dice Rolls	and structures to create	roll 2 die to get 2? 7? 10?
	and explain rules and	
(Teacher's Guide to	shortcuts.	Which number did/do you think
Activities, page 343)		would be rolled most (or least)
		often? Why?
	See also:	
	GMP 2.1, GMP 2.2,	
	GMP 4.2, GMP 6.1,	
	GMP 6.3, GMP 7.2	
	GMI 0.3, GMI 1.2	
<b>Activity 7-6 Dice Additi</b>	on and Subtraction Gam	ies
Playing Dice Addition	GMP 6.3 Be accurate	How do you find the sums (or
and Subtraction Games	when you count,	differences)?
	measure, and calculate.	
(Teacher's Guide to		When else is it important to add
Activities, pages 344	See also:	and subtract accurately?
and 345)	GMP 5.1, GMP 5.2	
Creating Number	<b>GMP 3.1</b> Explain both	How did you solve your partner's
Stories	what to do and why it	number story?
	works.	
(Teacher's Guide to		Why does that strategy work?
Activities, page 345)	See also:	
	GMP 2.1, GMP 2.2,	
	GMP 3.2, GMP 4.1,	
	GMP 4.2, GMP 5.1,	
A 4 1	GMP 5.2, GMP 6.1	
Activity 7-7 Late-in-the	GMP 6.3 Be accurate	What is the highest number very
Counting Forward and		What is the highest number you
Backward from Higher	when you count,	feel comfortable counting to?
Numbers	measure, and calculate.	What kinds of things (a.g. tasks
(Tagahar's Cuida ta	See also:	What kinds of things (e.g., tools,
(Teacher's Guide to	See also: GMP 5.1, GMP 7.1,	patterns, etc.) help you when you count so you don't make
		- viiii canni sa viii aan'i make
Activities, pages 346	*	1 *
and 347)	GMP 7.2	mistakes?

Counting the Class	GMP 1.4 Solve your	What are some different ways to
Collection	problem in more than	count our collection?
	one way.	
(Teacher's Guide to		Why might it be helpful to count
Activities, page 347)	See also:	in more than one way?
	GMP 1.2, GMP 1.5,	
	<b>GMP 2.1, GMP 2.2,</b>	
	GMP 4.1, GMP 6.3	
Activity 7-8 10s and 1s	with Craft Sticks	
Bundling Sticks	<b>GMP 8.1</b> Use patterns	After we bundle, do we have the
	and structures to create	same number of sticks as we had
(Teacher's Guide to	and explain rules and	before?*
Activities, pages 348	shortcuts.	
and 349)		Why is it easier to have them in
	See also:	bundles of 10s?*
	GMP 1.6, GMP 7.2	
Playing Number-Grid	<b>GMP 7.2</b> Use patterns	How can the Searcher (or the
Search	and structures to solve	Guide) use the patterns on the
	problems.	number grid to make a good guess
(Teacher's Guide to		(or give good clues)?
Activities, page 349)	See also:	
	GMP 3.2, GMP 6.1,	What are other ways we can use
	GMP 8.1, GMP 8.2,	patterns on the number grid?
	GMP 8.3	
	GIVII 0.5	
	ections with Craft Sticks	1100
Exploring Equivalent	ections with Craft Sticks GMP 2.1 Represent	How many different ways can you
	ections with Craft Sticks GMP 2.1 Represent problems and situations	How many different ways can you show (choose a number)?
Exploring Equivalent Names for Numbers	ections with Craft Sticks GMP 2.1 Represent problems and situations mathematically with	show (choose a number)?
Exploring Equivalent Names for Numbers (Teacher's Guide to	cctions with Craft Sticks GMP 2.1 Represent problems and situations mathematically with numbers, words,	show (choose a number)?  When else have we shown (or
Exploring Equivalent Names for Numbers (Teacher's Guide to Activities, pages 350	ections with Craft Sticks GMP 2.1 Represent problems and situations mathematically with numbers, words, pictures, symbols,	show (choose a number)?  When else have we shown (or named) numbers in different
Exploring Equivalent Names for Numbers (Teacher's Guide to	cctions with Craft Sticks GMP 2.1 Represent problems and situations mathematically with numbers, words, pictures, symbols, gestures, tables, graphs,	show (choose a number)?  When else have we shown (or
Exploring Equivalent Names for Numbers (Teacher's Guide to Activities, pages 350	ections with Craft Sticks GMP 2.1 Represent problems and situations mathematically with numbers, words, pictures, symbols,	show (choose a number)?  When else have we shown (or named) numbers in different
Exploring Equivalent Names for Numbers (Teacher's Guide to Activities, pages 350	ections with Craft Sticks GMP 2.1 Represent problems and situations mathematically with numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects.	show (choose a number)?  When else have we shown (or named) numbers in different
Exploring Equivalent Names for Numbers (Teacher's Guide to Activities, pages 350	ections with Craft Sticks GMP 2.1 Represent problems and situations mathematically with numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects.  See also:	show (choose a number)?  When else have we shown (or named) numbers in different
Exploring Equivalent Names for Numbers (Teacher's Guide to Activities, pages 350	ections with Craft Sticks GMP 2.1 Represent problems and situations mathematically with numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects.	show (choose a number)?  When else have we shown (or named) numbers in different
Exploring Equivalent Names for Numbers (Teacher's Guide to Activities, pages 350 and 351)	ections with Craft Sticks GMP 2.1 Represent problems and situations mathematically with numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects.  See also: GMP 1.6, GMP 2.2	show (choose a number)?  When else have we shown (or named) numbers in different ways?
Exploring Equivalent Names for Numbers  (Teacher's Guide to Activities, pages 350 and 351)  Working with Attribute	ections with Craft Sticks GMP 2.1 Represent problems and situations mathematically with numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects.  See also: GMP 1.6, GMP 2.2 GMP 8.3 Reflect on	show (choose a number)?  When else have we shown (or named) numbers in different ways?  When you make attribute trains,
Exploring Equivalent Names for Numbers  (Teacher's Guide to Activities, pages 350 and 351)  Working with Attribute Blocks	ections with Craft Sticks GMP 2.1 Represent problems and situations mathematically with numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects.  See also: GMP 1.6, GMP 2.2 GMP 8.3 Reflect on your thinking before,	show (choose a number)?  When else have we shown (or named) numbers in different ways?  When you make attribute trains, how do you figure out what block
Exploring Equivalent Names for Numbers  (Teacher's Guide to Activities, pages 350 and 351)  Working with Attribute Blocks (Teacher's Guide to	ctions with Craft Sticks GMP 2.1 Represent problems and situations mathematically with numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects.  See also: GMP 1.6, GMP 2.2  GMP 8.3 Reflect on your thinking before, during, and after you	show (choose a number)?  When else have we shown (or named) numbers in different ways?  When you make attribute trains,
Exploring Equivalent Names for Numbers  (Teacher's Guide to Activities, pages 350 and 351)  Working with Attribute Blocks	ections with Craft Sticks GMP 2.1 Represent problems and situations mathematically with numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects.  See also: GMP 1.6, GMP 2.2 GMP 8.3 Reflect on your thinking before,	show (choose a number)?  When else have we shown (or named) numbers in different ways?  When you make attribute trains, how do you figure out what block can go next on the train?
Exploring Equivalent Names for Numbers  (Teacher's Guide to Activities, pages 350 and 351)  Working with Attribute Blocks (Teacher's Guide to	ections with Craft Sticks GMP 2.1 Represent problems and situations mathematically with numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects.  See also: GMP 1.6, GMP 2.2  GMP 8.3 Reflect on your thinking before, during, and after you solve a problem.	show (choose a number)?  When else have we shown (or named) numbers in different ways?  When you make attribute trains, how do you figure out what block can go next on the train?  When someone puts a block on
Exploring Equivalent Names for Numbers  (Teacher's Guide to Activities, pages 350 and 351)  Working with Attribute Blocks (Teacher's Guide to	ctions with Craft Sticks GMP 2.1 Represent problems and situations mathematically with numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects.  See also: GMP 1.6, GMP 2.2  GMP 8.3 Reflect on your thinking before, during, and after you solve a problem.  See also:	when you make attribute trains, how do you figure out what block can go next on the train?  When someone puts a block on the train, how do you check to see
Exploring Equivalent Names for Numbers  (Teacher's Guide to Activities, pages 350 and 351)  Working with Attribute Blocks (Teacher's Guide to	ections with Craft Sticks GMP 2.1 Represent problems and situations mathematically with numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects.  See also: GMP 1.6, GMP 2.2  GMP 8.3 Reflect on your thinking before, during, and after you solve a problem.	show (choose a number)?  When else have we shown (or named) numbers in different ways?  When you make attribute trains, how do you figure out what block can go next on the train?  When someone puts a block on
Exploring Equivalent Names for Numbers  (Teacher's Guide to Activities, pages 350 and 351)  Working with Attribute Blocks (Teacher's Guide to	ctions with Craft Sticks GMP 2.1 Represent problems and situations mathematically with numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects.  See also: GMP 1.6, GMP 2.2  GMP 8.3 Reflect on your thinking before, during, and after you solve a problem.  See also:	when you make attribute trains, how do you figure out what block can go next on the train?  When someone puts a block on the train, how do you check to see

Activity 7-10 Number Scrolls		
Making Number Scrolls  (Teacher's Guide to Activities, page 352)	GMP 7.2 Use patterns and structures to solve problems.  See also: GMP 2.1, GMP 5.3, GMP 6.3, GMP 7.1, GMP 8.1, GMP 8.2	What patterns do you see on the Class Number Grid?*  How can you use the patterns in the first 100 numbers to help you continue your number scroll past 100?
Estimating Quarters  (Teacher's Guide to Activities, page 353)	GMP 1.5 Check whether your solution makes sense.  See also: GMP 1.2, GMP 1.4, GMP 1.6, GMP 6.2, GMP 8.3	Pause after counting about half of the quarters in the jar and ask: Does your estimate make sense? Would you like to change your estimate? Why or why not?  When else do you check whether your answers make sense? Why is this important?
Activity 7-11 Decade Co	ount	
Recording Decades While Counting  (Teacher's Guide to Activities, pages 354 and 355)	GMP 2.2 Explain the meanings of the numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects you and others use.  See also: GMP 2.1, GMP 7.2, GMP 8.1, GMP 8.2	What does the 8 stand for in the number 83 (or another pair of numbers)?  How is 8 different from 80?
Playing Dice Addition and Subtraction Games (Teacher's Guide to Activities, page 355)	GMP 3.1 Explain both what to do and why it works.  See also: GMP 2.1, GMP 5.1	Does it matter in what order you add (or subtract) the numbers on the dice? Why or why not?  How are addition and subtraction different?

Activity 7-12 Plus or Ma	inus Game	
Playing the <i>Plus or</i>	<b>GMP 2.2</b> Explain the	How does the number of counters
Minus Game	meanings of the	on the board change when you roll
	numbers, words,	a + (or a -) number?
(Teacher's Guide to	pictures, symbols,	
Activities, page 356)	gestures, tables, graphs,	Would you rather roll
	and concrete objects	+ numbers or – numbers? Why?
	you and others use.	
	See also:	
	<b>GMP 1.6, GMP 2.1,</b>	
	GMP 6.3	
Counting the Class	GMP 1.2 Make a plan	Who has an idea or plan for how
Collection	for solving your	we might count everything in our
	problem.	collection? How many different
(Teacher's Guide to		ways could we try?
Activities, page 357)	See also:	
	GMP 1.3, GMP 1.4,	When else have you had to
	GMP 1.5, GMP 6.3,	make a plan to solve a problem?
	GMP 7.2, GMP 8.1,	
	GMP 8.2	
Activity 7-13 Double Di	gits with Dice	
Comparing 2-Digit	GMP 2.1 Represent	How can you use the craft sticks
Numbers	problems and situations	to show whether 52 or 25 (or
	mathematically with	another pair of numbers) is larger?
(Teacher's Guide to	numbers, words,	, ,
Activities, pages 358	pictures, symbols,	How could you use the number
and 359)	gestures, tables, graphs,	line or number grid to show which
	and concrete objects.	number is larger? Would that
		work for any two numbers?
	See also:	
	<b>GMP 1.6, GMP 2.2,</b>	
	GMP 3.1, GMP 5.1,	
	<b>GMP 5.2, GMP 7.2,</b>	
	GMP 8.1, GMP 8.2	
Playing Money Cube	GMP 4.1 Apply	Have you ever exchanged coins in
	mathematical ideas to	real life?
(Teacher's Guide to	real-world situations.	
Activities, page 359)		If you were going to the candy
	See also:	store to buy a 50-cent candy bar,
	GMP 1.2, GMP 1.5,	would you rather use pennies or

<b>Activity 7-14 Numbers</b>	in Sequence	
Ordering Numbers  (Teacher's Guide to Activities, page 360)	GMP 1.5 Check whether your solution makes sense.  See also: GMP 1.1, GMP 1.2, GMP 2.2, GMP 3.1, GMP 5.1, GMP 7.2, GMP 8.1, GMP 8.2, GMP 8.3	How could you check whether you put the numbers in the right order? Is there a tool that might help you?  How could you help a classmate if you noticed that his/her numbers were not in order?
Graphing Lengths of Names and Discussing Probability  (Teacher's Guide to Activities, page 361)	GMP 4.2 Use mathematical models such as graphs, drawings, tables, symbols, numbers, and diagrams to solve problems.  See also: GMP 1.1, GMP 1.2, GMP 1.5, GMP 1.6, GMP 2.1, GMP 2.2, GMP 4.1, GMP 6.1	Am I more likely to pick a name with 3 letters or one with 5 letters? Is it certain, unlikely, or impossible that I will pick a name with 1 letter? 8 letters?* Why?  How does the graph help you answer these questions?
Activity 7-15 "What's N	// // // // // // // // // // // // //	
Comparing Patterns  (Teacher's Guide to Activities, pages 362 and 363)	GMP 8.1 Use patterns and structures to create and explain rules and shortcuts.  See also: GMP 1.1, GMP 1.6, GMP 2.1, GMP 3.1, GMP 3.2, GMP 7.1, GMP 7.2, GMP 8.2, GMP 8.3	These patterns have something in common.* What is it?  Can you use your cubes to make a similar pattern with colors—a pattern that follows the same rule? How did you figure out what to do?*

Making Name	GMP 2.1 Represent	How many combinations can we
Collections	problems and situations mathematically with	make with 10 sticks?
(Teacher's Guide to	numbers, words,	How can we show combinations
Activities, page 363)	pictures, symbols,	with pictures? With number
	gestures, tables, graphs,	sentences?
	and concrete objects.	
	See also:	
	GMP 1.1, GMP 1.2,	
	<b>GMP 1.4, GMP 1.6,</b>	
	GMP 2.2	
Activity 7-16 Bead Strip		
Making Name	GMP 1.6 Connect	How are the bead strings like
Collections	mathematical ideas and	number sentences?
	representations to one	
(Teacher's Guide to	another.	How are the bead strings like
Activities, pages 364		dominoes, dice, or other
and 365)	See also:	representations we might put in
	GMP 2.1, GMP 2.2,	name collection boxes?
	GMP 3.1, GMP 6.1	
Playing <i>Monster</i>	GMP 8.3 Reflect on	Have you gotten better at playing
Squeeze	your thinking before,	Monster Squeeze since the
squeeze	during, and after you	beginning of kindergarten? How?
(Teacher's Guide to	solve a problem.	segming of minutifactors. How.
Activities, page 365)	F	Have you learned any strategies
, 1 <i>U</i> - /	See also:	that make the game go faster?
	GMP 1.3, GMP 1.4,	
	GMP 5.1, GMP 8.3	
	,	

<sup>\*</sup>denotes a question that is currently in the  $Everyday\ Mathematics\ materials$ .

Grade K Section 8		
Activity	Everyday Mathematics	<b>Guiding Questions</b>
	Goal for	
	Mathematical Practice	
Activity 8-1 Ones, Tens,		
Playing the <i>Ones</i> , <i>Tens</i> ,	GMP 7.2 Use patterns	How many craft sticks would we
Hundreds Game	and structures to solve	have if we had 10 bundles of 10?*
(Tagahan's Cuida ta	problems.	How could we find out?*
(Teacher's Guide to	See also:	What counting pattern could we
Activities, pages 380 and 381)	GMP 2.1, GMP 6.3	What counting pattern could we use?
and 301)	GWII 2.1, GWII 0.3	use:
Counting the Class	GMP 8.1 Use patterns	How can we organize our
Collection	and structures to create and explain rules and	collection to make counting easier?
(Teacher's Guide to	shortcuts.	
Activities, page 381)		Why does it work to organize
	See also:	and count by 10s and 1s than to
	GMP 1.2, GMP 1.4,	count just by 1s? Should we get
	GMP 1.5, GMP 1.6,	the same answer? Which
	<b>GMP 6.3, GMP 8.2</b>	method is easier (or faster)?
<b>Activity 8-2 How Long</b>	Is an Hour?	
Marking Hours	GMP 4.1 Apply	What is something you would like
	mathematical ideas to	to do for an hour?
(Teacher's Guide to	real-world situations.	
Activities, page 382)		What other units of time do you
	See also:	know?
	GMP 1.6, GMP 2.2	
Graphing Favorite	<b>GMP 4.2</b> Use	What can we find out from this
Math Games	mathematical models	graph?
Tradit Sames	such as graphs,	Supin
(Teacher's Guide to	drawings, tables,	How could we use this graph to
Activities, page 383)	symbols, numbers, and	help us decide which games to
	diagrams to solve	keep playing for the rest of the
	problems.	year?
	See also:	
	GMP 2.1, GMP 2.2, GMP 4.1	
	GMI 4.1	
	1	

Activity 8-3 The Hour-l	Hand Clock	
Making an Hour-Hand	GMP 5.2 Use	Where is the hour hand when the
Clock	mathematical tools	time is <i>just before</i> 5 o'clock (or
	correctly and efficiently.	another hour)?
(Teacher's Guide to		Just after 5?
Activities, pages 384	See also:	Halfway between 5 and 6 o'clock?
and 385)	<b>GMP 4.1, GMP 6.1,</b>	
	GMP 6.2, GMP 6.3	What mistakes could someone
		make when showing the hour on a
		clock?
Making Shapes and	GMP 3.1 Explain both	Does your shape change when you
Structures	what to do and why it	turn (rotate) it or flip it over? Is it
Structures	works.	still the same shape?
(Teacher's Guide to	W office.	sum ene sume snape.
Activities, page 386)	See also:	Why doesn't a shape change
,10,,	GMP 1.6, GMP 2.1,	when it is flipped or rotated?
	GMP 2.2, GMP 6.1	**
Activity 8-4 High Roller	Game	
Playing High Roller	<b>GMP 8.1</b> Use patterns	If you count all the dots on both
	and structures to create	die, do you get the same total as
(Teacher's Guide to	and explain rules and	when you count on from the
Activities, pages 388	shortcuts.	higher number? Why?
and 389)		
	See also:	Why is it useful to know the
	GMP 1.6, GMP 6.3, GMP 8.2	counting on strategy?
Fishing for Children:	GMP 1.1 Work to make	What do you have to do before
"What's My Rule?"	sense of your problem.	you can guess the fishing rule?
What Sivily Raio.	sense of your problem.	you can guess the fishing fale.
(Teacher's Guide to	See also:	What advice would you give
Activities, page 389)	GMP 1.5, GMP 7.1,	someone to help them play the
	GMP 7.2, GMP 8.1,	game?
	GMP 8.2	
	n to Function Machines	
Introducing the	<b>GMP 8.2</b> Use	What do you notice about the in
Function Machine	properties, rules, and	and <i>out</i> numbers for the "add 1"
( <del></del>	shortcuts to solve	(or "take away 1") rule?
(Teacher's Guide to	problems.	
Activities, page 390)	G 1	Why do you think it's called a
	See also:	"rule"?
	GMP 2.1, GMP 2.2,	
	GMP 3.1, GMP 5.1,	
	GMP 6.3, GMP 8.1,	
	GMP 8.3	

Reviewing Coins	GMP 3.2 Work to make	How did you know which coin I
	sense of others'	was describing? Which clue(s)
(Teacher's Guide to	mathematical thinking.	helped you the most?
Activities, page 391)		
	See also:	What questions could you ask me
	GMP 2.2, GMP 6.1,	to figure out which coin I want
	GMP 8.2	you to find?
Activity 8-6 Number Gy		
Playing Number	<b>GMP 6.1</b> Communicate	What happens to a number when
Gymnastics	your mathematical	you reverse the digits?
	thinking clearly and	
(Teacher's Guide to	precisely.	What happens during this game if
Activities, pages 392		the clues aren't clear?
and 393)	See also:	
	GMP 2.1, GMP 2.2,	
	GMP 3.2, GMP 5.1	
Studying Weather and	<b>GMP 4.2</b> Use	Write a question about the weather
Temperature Data	mathematical models	graphs for someone else to
	such as graphs,	answer.*
(Teacher's Guide to	drawings, tables,	
Activities, page 393)	symbols, numbers, and	Why are graphs helpful for
	diagrams to solve	showing weather and
	problems.	temperature data?
	See also:	
	GMP 4.1	
Activity 8-7 Introduction		
Exploring the \$1 Bill	GMP 4.1 Apply	What can you buy with \$1?*
	mathematical ideas to	
(Teacher's Guide to	real-world situations.	What could we buy with all of our
Activities, page 394)		dollars put together?*
	C 1	
	See also:	
D ' ' E '	GMP 2.1, GMP 7.2	TT 12.1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Reviewing Function	<b>GMP 8.2</b> Use	How did you know what out
Machines	properties, rules, and	numbers to write in your partner's
(T. 1 ) C : 1 .	shortcuts to solve	function machine?
(Teacher's Guide to	problems.	
Activities, page 395)	Con alans	Could you solve a function
	See also:	machine problem if you didn't
	GMP 1.1, GMP 1.2,	know the rule?
	GMP 1.5, GMP 2.1,	
	GMP 2.2, GMP 8.1,	
	GMP 8.3	

Activity 8-8 One-Dollar	Game	
Playing the <i>One-Dollar</i>	<b>GMP 3.1</b> Explain both	What should you do when you get
Game	what to do and why it	10 pennies? Why can you trade 10
	works.	pennies for one dime?
(Teacher's Guide to		1
Activities, page 396)	See also:	What should you do when you get
	GMP 1.2, GMP 1.6,	10 dimes? Why can you trade 10
	GMP 6.3, GMP 7.2,	dimes for one dollar?
	<b>GMP 8.1, GMP 8.2</b>	
Making Name	GMP 3.2 Work to make	Share your name collection box
Collections	sense of others'	with a classmate(s). What names
	mathematical thinking.	did he/she think of that you could
(Teacher's Guide to		add to your box?
Activities, page 397)		
	See also:	What names can you share with
	GMP 1.4, GMP 2.1,	him/her?
	GMP 2.2	
Activity 8-9 Name Colle		
Making Name	<b>GMP 1.3</b> Try different	What could you do if you are
Collection Posters	approaches when your	having trouble thinking of more
	problem is hard.	names for your number?
(Teacher's Guide to		
Activities, pages 398	See also:	What do you do when problems
and 399)	GMP 1.4, GMP 1.5,	are hard in other situations?
	GMP 2.1, GMP 2.2,	
	GMP 3.2, GMP 6.1	
Number Scrolling	GMP 1.5 Check	How can you tell if you made a
	whether your solution	mistake on your number scroll?
(Teacher's Guide to	makes sense.	
Activities, page 399)		How can you use patterns to find
	See also:	and fix mistakes on your scroll?
	GMP 2.1, GMP 6.3,	
	GMP 7.1, GMP 7.2	
	My Rule?" with Numbers	
Solving "What's My	GMP 1.3 Try different	What is one way you tried to
Rule?" with Numbers	approaches when your	figure out the rule? Did anyone try
	problem is hard.	a different way to figure out the
(Teacher's Guide to		rule?
Activities, pages 400		
and 401)	See also:	Why is it good to try more than
	GMP 1.1, GMP 1.2,	one way to solve hard problems?
	GMP 1.4, GMP 1.5,	
	GMP 2.1, GMP 2.2,	
	GMP 3.2, GMP 8.1,	
	GMP 8.2, GMP 8.3	

Using the Hour-Hand	<b>GMP 6.2</b> Use the level	How do you show the difference
Clock	of precision you need	between a little before 10 o'clock
	for your problem.	and <i>a little past 10 o'clock</i> on your
(Teacher's Guide to	, and the second	clock?
Activities, page 401)	See also:	Between half past 10 o'clock and
page 101)	GMP 4.1, GMP 5.2,	exactly 10 o'clock?
	GMP 5.3	
		Why do we talk about
		approximate times like <i>a little</i>
		before 10 or half past 10?
Activity 8-11 Hour-Har	nd, Minute-Hand Story	, , , , , , , , , , , , , , , , , , ,
Telling the "Hour-	GMP 5.2 Use	How did you set your paper clock
Hand, Minute-Hand	mathematical tools	to match the time on the classroom
Story"	correctly and efficiently.	clock?
	j	
(Teacher's Guide to	See also:	What are some differences
Activities, pages 402	GMP 4.1	between the hour hand and the
and 403)		minute hand?
Playing Dice Addition	GMP 2.1 Represent	What number sentence could you
and Subtraction Games	problems and situations	write to show what happened on
	mathematically with	your turn?
(Teacher's Guide to	numbers, words,	
Activities, page 403)	pictures, symbols,	Could you make up a number
	gestures, tables, graphs,	story to match your number
	and concrete objects.	sentence?
	3	
	See also:	
	<b>GMP 1.6, GMP 2.2</b>	
Activity 8-12 Time Mate	ch Game	
Playing Time Match	GMP 1.6 Connect	Does anyone know what the
	mathematical ideas and	o'clock times look like on a digital
(Teacher's Guide to	representations to one	clock? What is the same about
Activities, pages 404	another.	them?*
and 405)		
	See also:	How else are analog and digital
	<b>GMP 2.1, GMP 2.2,</b>	clocks similar and different?
	GMP 4.1, GMP 5.2	
Dividing Wholes into	<b>GMP 6.2</b> Use the level	Does a line down the center of a
Halves	of precision you need	shape always divide it into equal
	for your problem.	halves? Why or why not?
(Teacher's Guide to		
Activities, page 405)	See also:	Why are some shapes easier to
	<b>GMP 2.1, GMP 2.2,</b>	divide in half than others?
	GMP 6.3	

<b>Activity 8-13 Missing N</b>	umber Problems	
Solving Missing Number Pocket Problems  (Teacher's Guide to Activities, pages 406 and 407)	GMP 3.1 Explain both what to do and why it works.  See also: GMP 1.1, GMP 1.2, GMP 1.3, GMP 1.4, GMP 1.5, GMP 1.6, GMP 2.1, GMP 2.2	Did I add or subtract objects? How do you know?*  How many did I add (or subtract)?  How did you figure it out?*
Playing <i>I Spy:</i> Shapes and Patterns  ( <i>Teacher's Guide to Activities</i> , page 407)	GMP 1.3 Try different approaches when your problem is hard.  See also: GMP 1.5, GMP 4.1, GMP 7.1, GMP 7.2, GMP 8.2, GMP 8.3	What could you do if you're having trouble figuring out the shape?  Why is it important to keep trying and not give up?
<b>Activity 8-14 Number S</b>	tories with Calculators	
Telling Number Stories with Calculators  (Teacher's Guide to Activities, pages 408 and 409)	GMP 5.3 Estimate and use what you know to check the answers you find using tools.  See also: GMP 1.1, GMP 1.2, GMP 1.4, GMP 1.5, GMP 2.1, GMP 5.2	How could you check the answers you get with a calculator?  Before you add or subtract on your calculator, can you do the problem mentally (in your head)? Did you get the same answer on your calculator? Why or why not?
Playing Number Gymnastics with Slates (Teacher's Guide to Activities, page 409)	GMP 2.1 Represent problems and situations mathematically with numbers, words, pictures, symbols, gestures, tables, graphs, and concrete objects.  See also: GMP 2.2, GMP 6.1, GMP 6.3	Why is it helpful to write each new number while playing Number Gymnastics?  When else do you need to write 2-digit numbers?

Activity 8-15 Pan Balance with Uniform Weights			
Weighing Objects	<b>GMP 5.3</b> Estimate and	Ask children to estimate how	
	use what you know to	many of the weights they think it	
(Teacher's Guide to	check the answers you	will take to balance the object.*	
Activities, pages 410	find using tools.	, and the second	
and 411)		Why do we make estimates before	
	See also:	weighing an object?	
	GMP 2.2, GMP 3.1,		
	SMP 4.1, GMP 5.2,		
	GMP 6.3		
Practicing Number	GMP 2.1 Represent	What new ways have you learned	
Writing	problems and situations	to represent the numbers?	
	mathematically with		
(Teacher's Guide to	numbers, words,	How has writing numbers	
Activities, page 412)	pictures, symbols,	changed for you since the	
	gestures, tables, graphs,	beginning of Kindergarten?	
	and concrete objects.		
	See also:		
A 4 4 0 16 T 4 1 4	GMP 2.2		
Activity 8-16 Introducti		D 01 1010111 1 1 1 1 1 1	
Exploring the \$10 Bill	GMP 7.2 Use patterns	Do \$1 and \$10 bills remind you of	
(Tanahan) - Carida ta	and structures to solve	any coins? In what way?	
(Teacher's Guide to	problems.	Harry many \$10 bills and be	
Activities, pages 414	Con also.	How many \$10 bills can be	
and 415)	See also:	exchanged for a \$100 bill?* Why	
	GMP 1.6, GMP 4.1,	do you think so? What number	
	GMP 6.1, GMP 6.3	patterns might help you figure this out?	
Measuring in Different	<b>GMP 5.2</b> Use	How do you know whether you	
Ways	mathematical tools	have measured something	
ii ays	correctly and	correctly? How could you check	
(Teacher's Guide to	efficiently.	your measurements?	
Activities, page 415)	Ciffciently.	your mousurements:	
richinus, page 413)	See also:	Are some measuring tools harder	
	GMP 1.5, GMP 2.1,	(or easier) to use? Why?	
	GMP 2.2, GMP 3.1,	(or empley) to table trilly .	
	GMP 5.1		

<sup>\*</sup>denotes a question that is currently in the  $Everyday\ Mathematics\ materials$ .