

NOTE TO TEACHER

This product contains two different resources to easily implement the Common Core Mathematical Practices into your classroom.

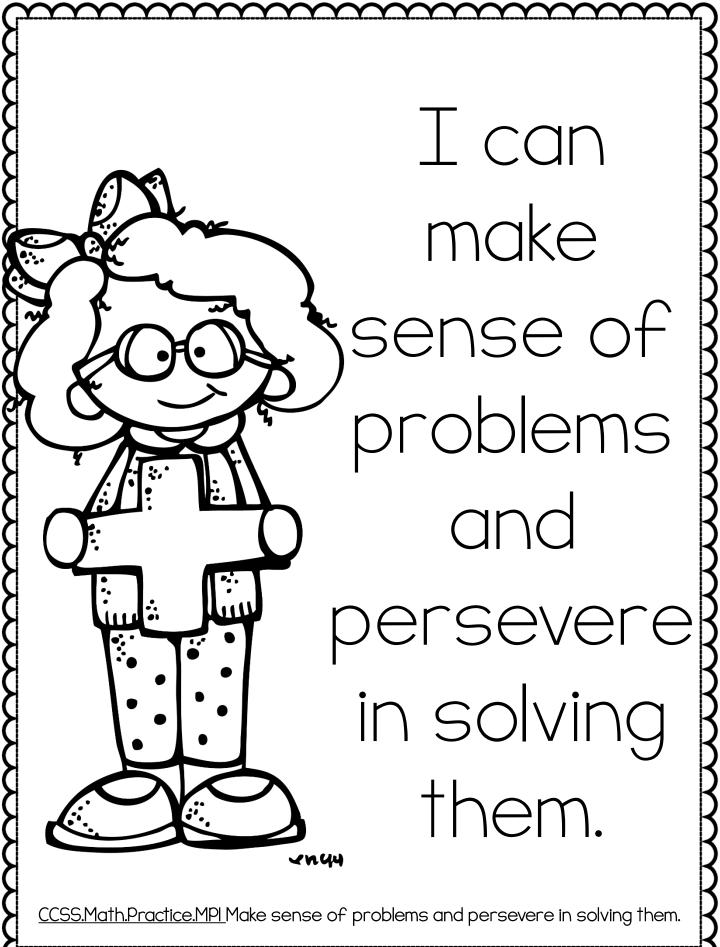
Journal Prompts/Essential Questions: These are 49 different prompts to get the students thinking and applying the practice to what they know. These are stand alone prompts/questions and do not need problems to go along with them.

<u>Choice Boards</u>: The choice boards are to be completed after solving a math problem. The choice boards are divided by practice standard (except MP.7 and MP.8 are combined). The students can choose which question to answer about the problem they just completed. (Math problems are not included in this resource.) The choice boards would work great at a math center.

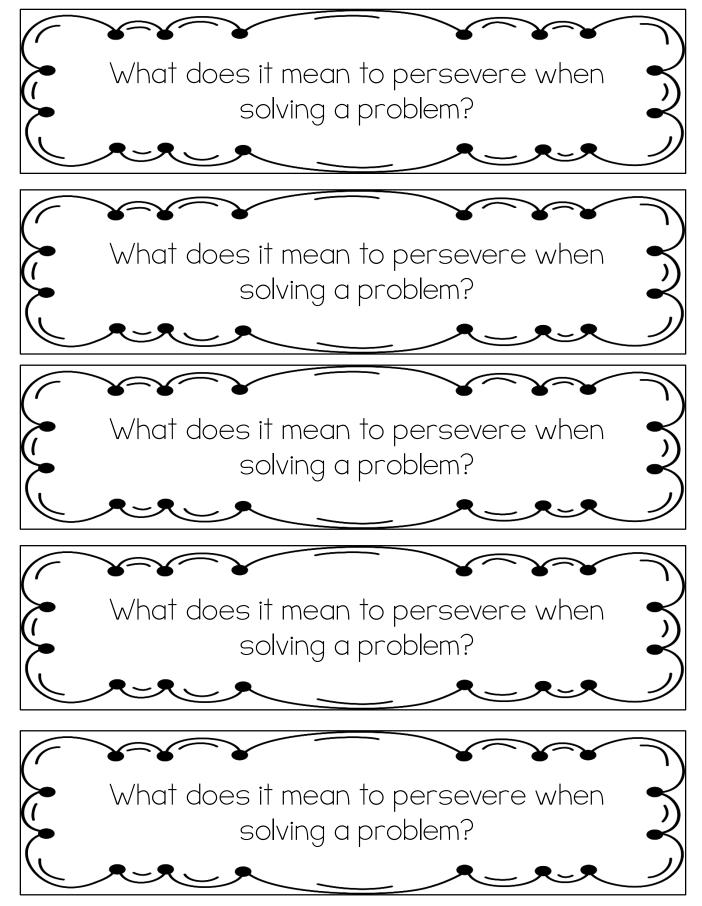
JOURNAL PROMPTS OR ESSENTIAL QUESTIONS

One Prompt Per Page Version: These could be kept in a folder or reduced in size when printed to be glued into math notebooks.

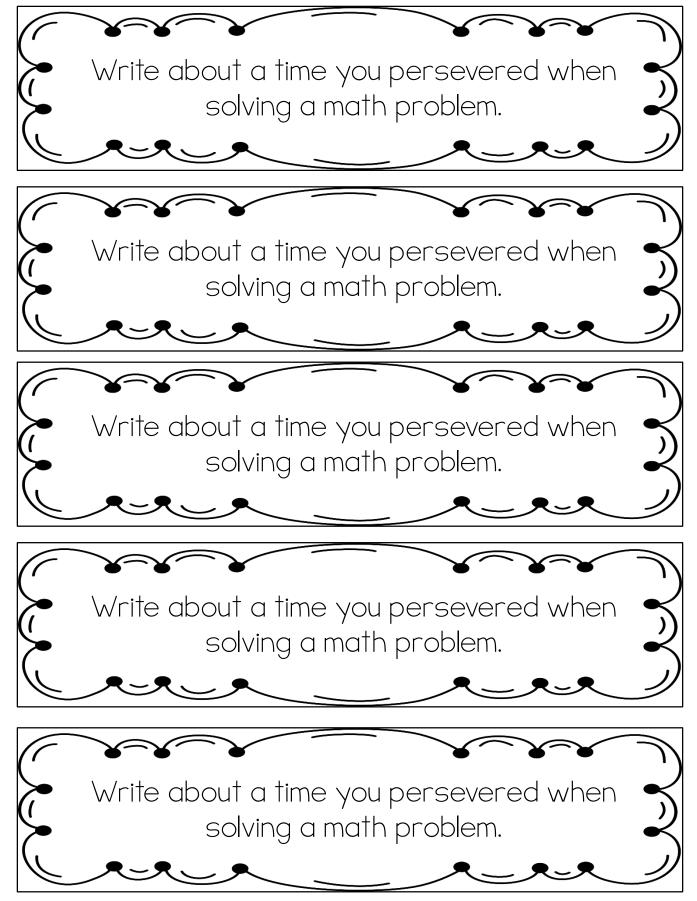
<u>5 Prompts Per Page Version</u>: Use this version to save copies. The students would cut and paste the prompt to their notebooks and then write underneath the prompt.



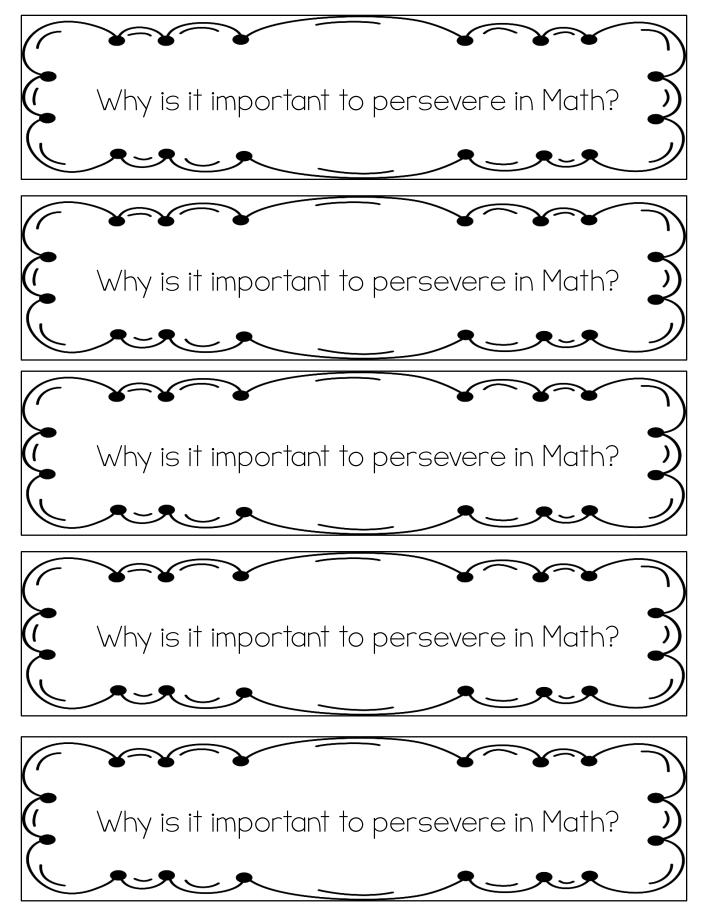
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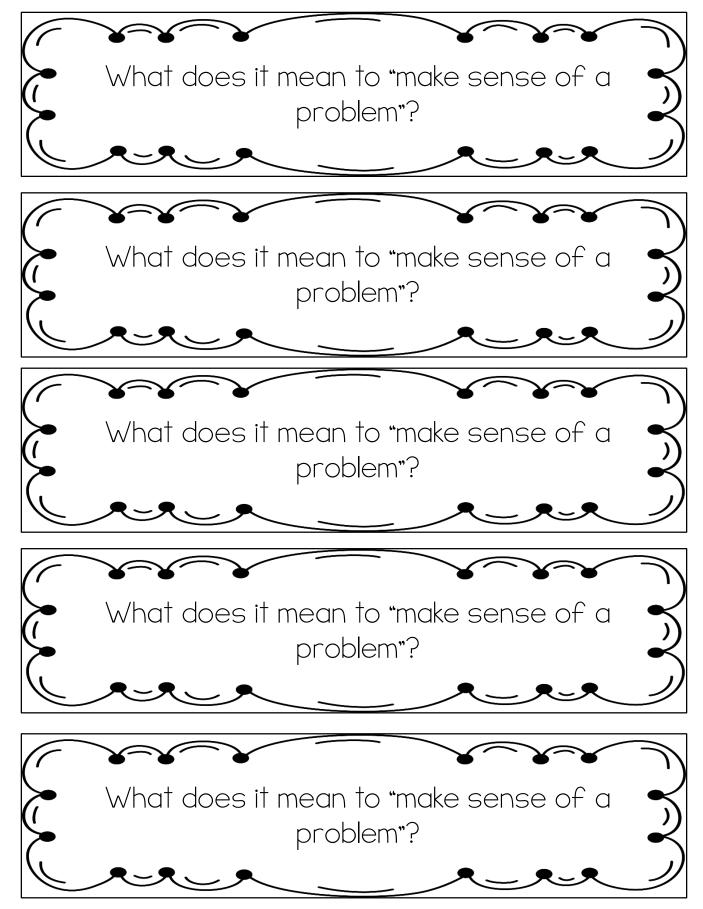
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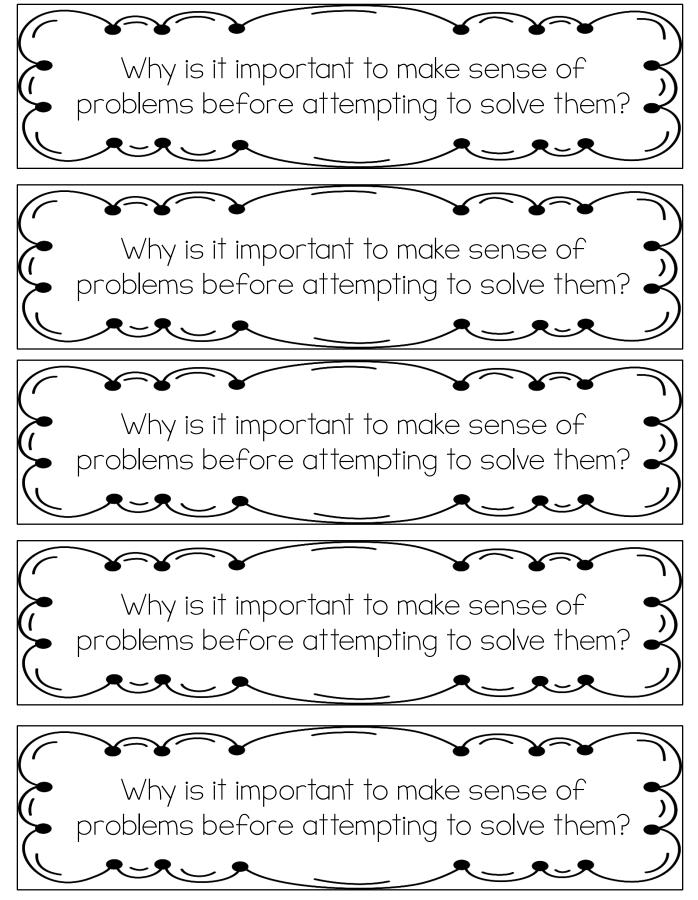
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Why is it important to persevere in Math?	5
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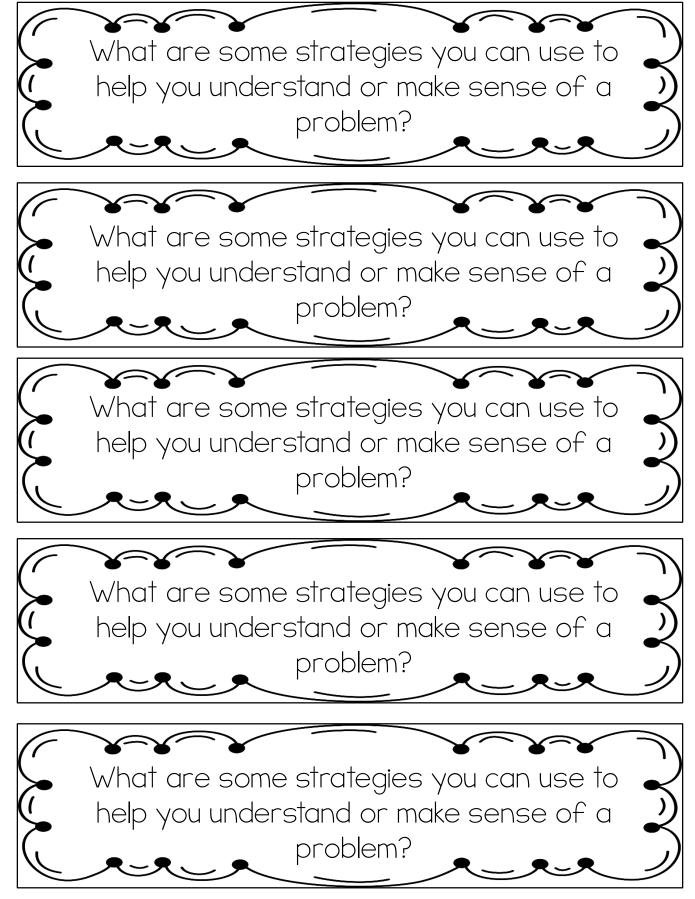
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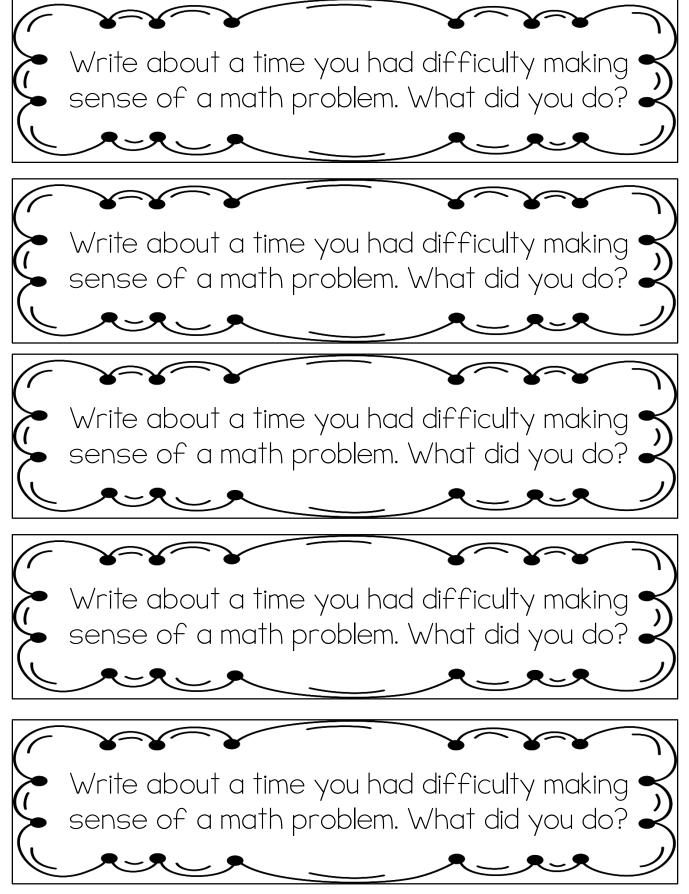
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	problems before attempting to solve them?
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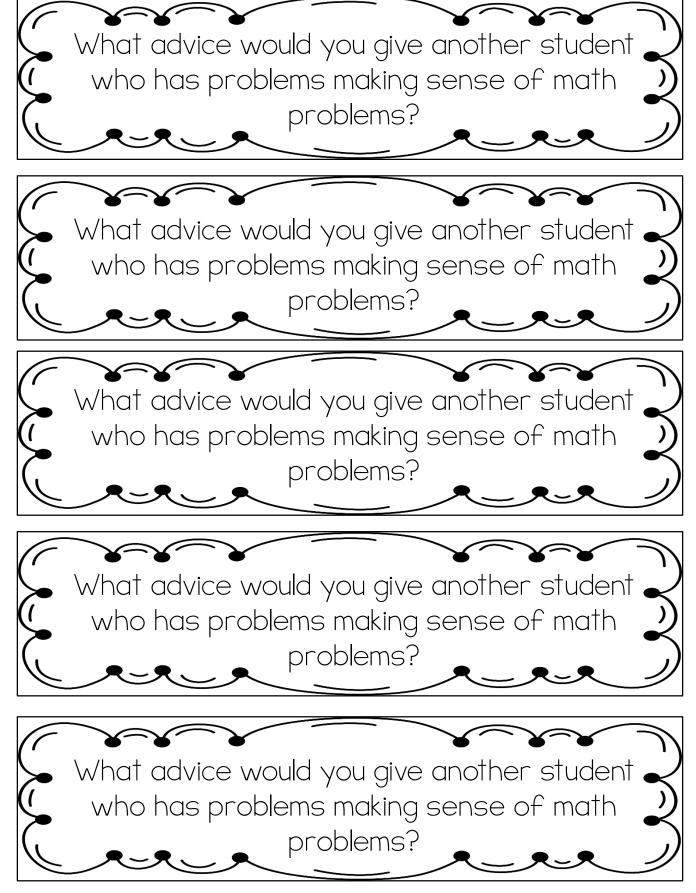
	What are some strategies you can use to help you understand or make sense of a	
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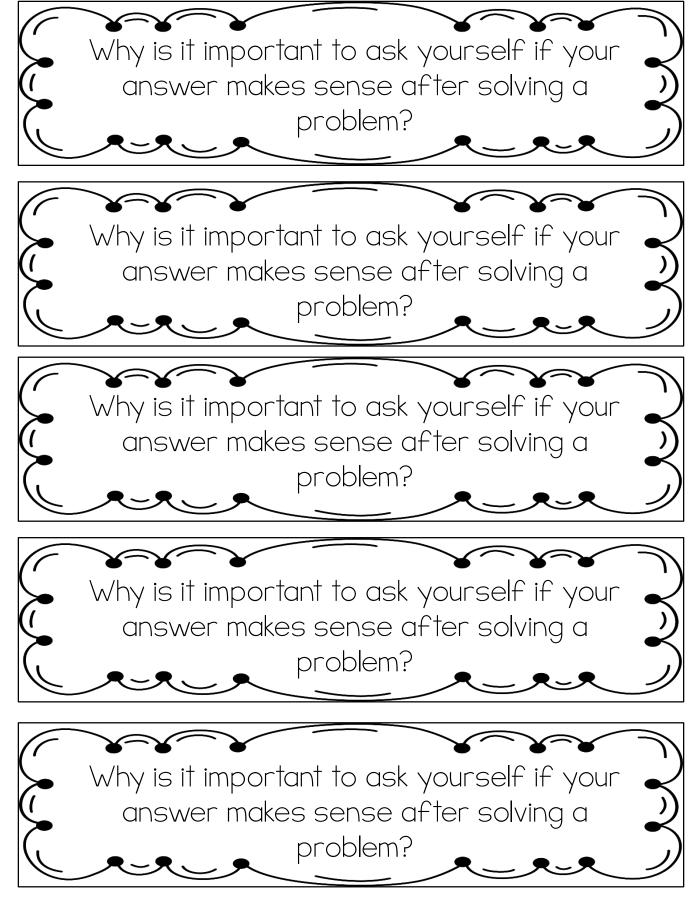
sense of a math problem. What did you do?	ノ _
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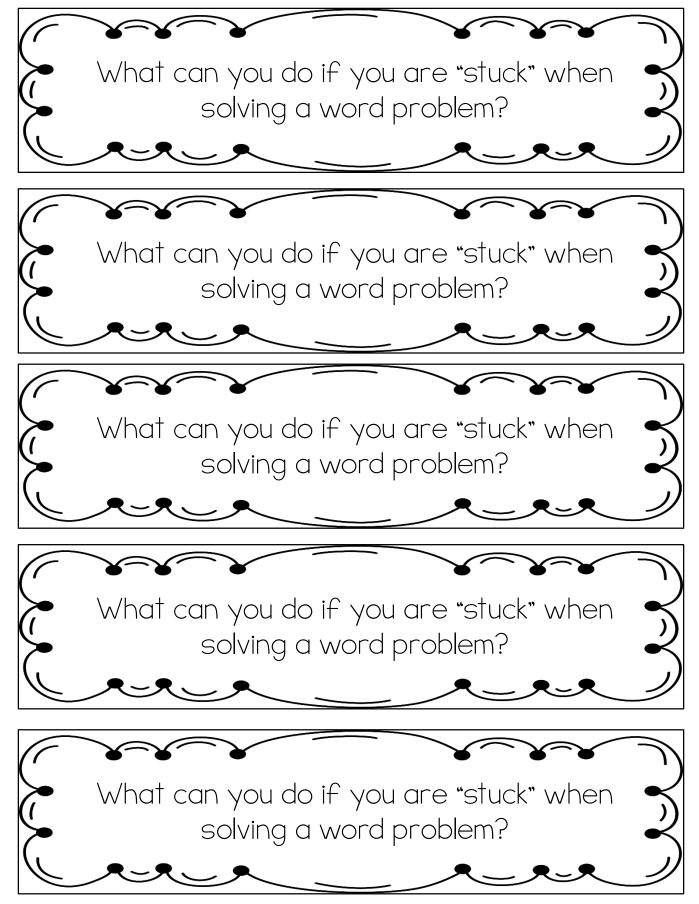
	What advice would you give another student who has problems making sense of math problems?
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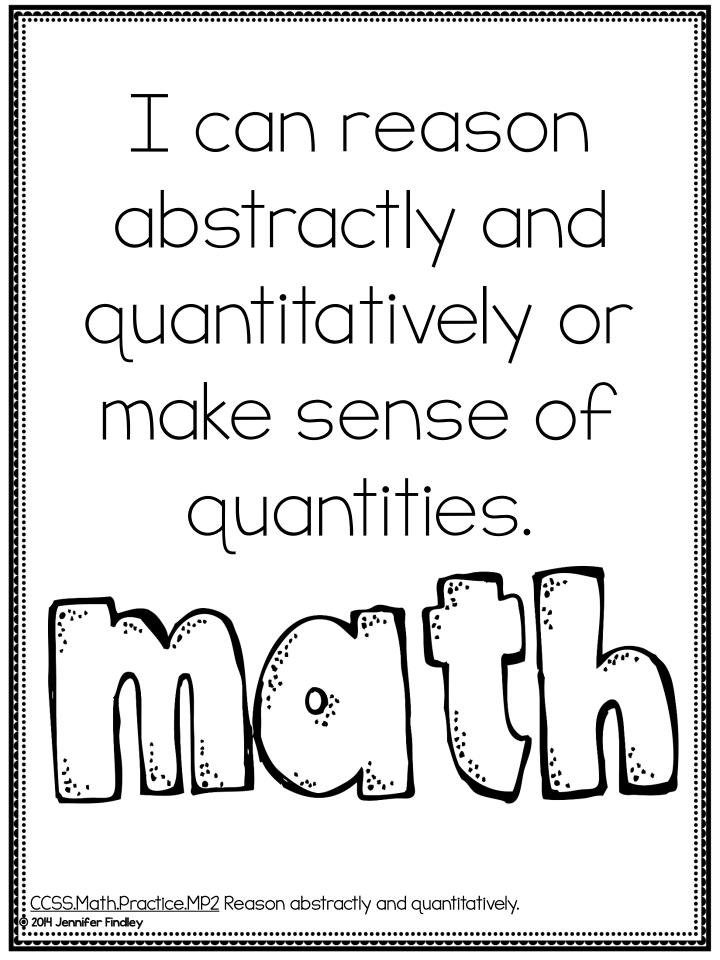


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	Why is it important to ask yourself if your
	answer makes sense after solving a
	problem?
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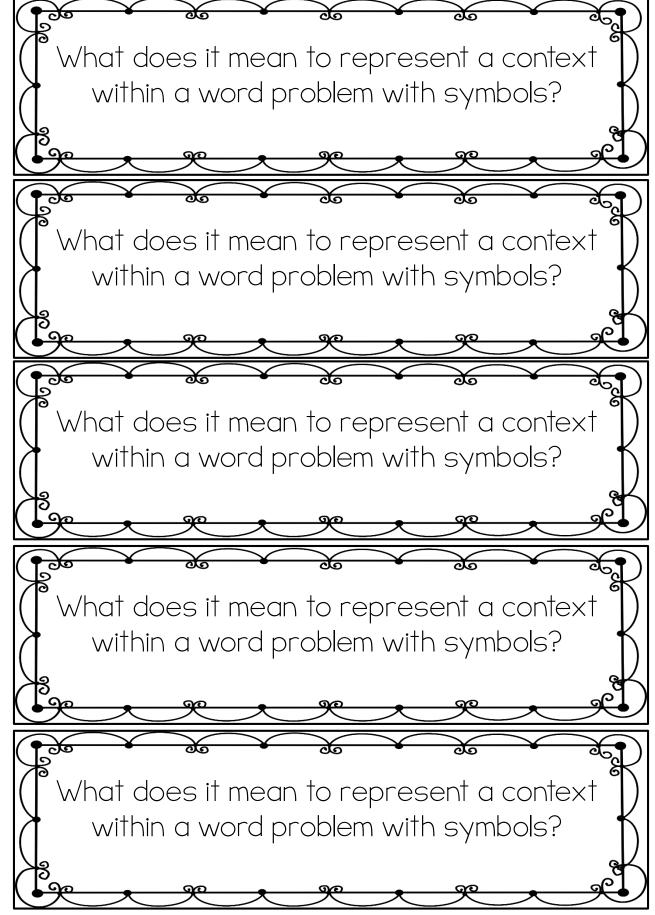


What can you do if you are "stuck" when solving a word problem?	YYY		<u>Y Y</u>
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		What can you do if you are "stuck" when	\checkmark
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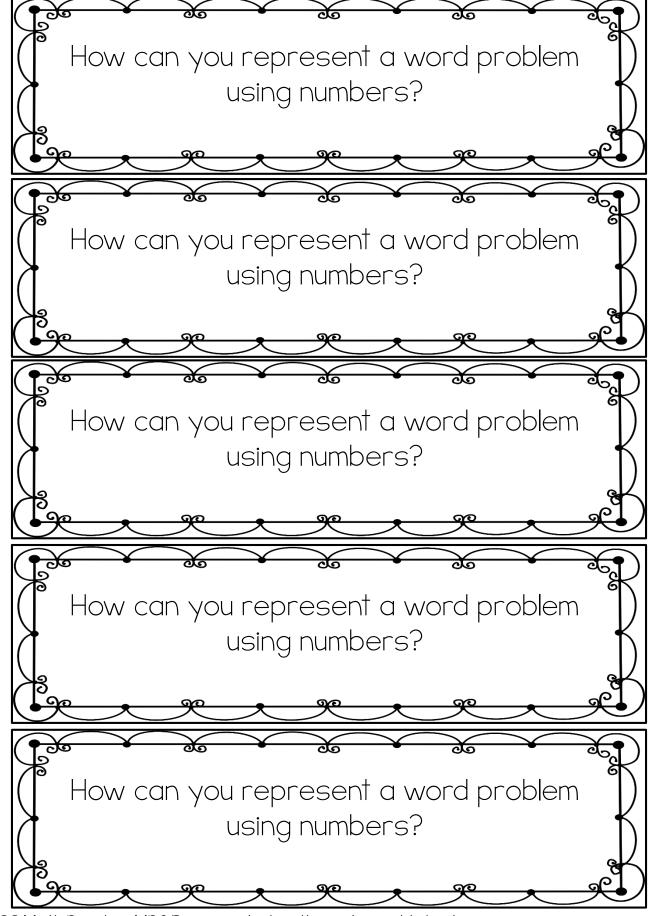




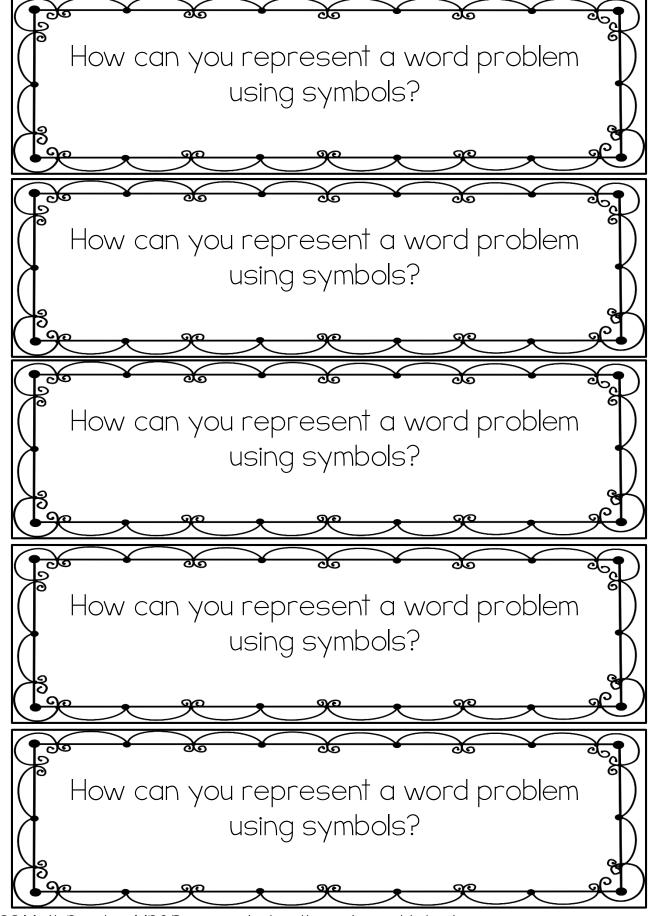
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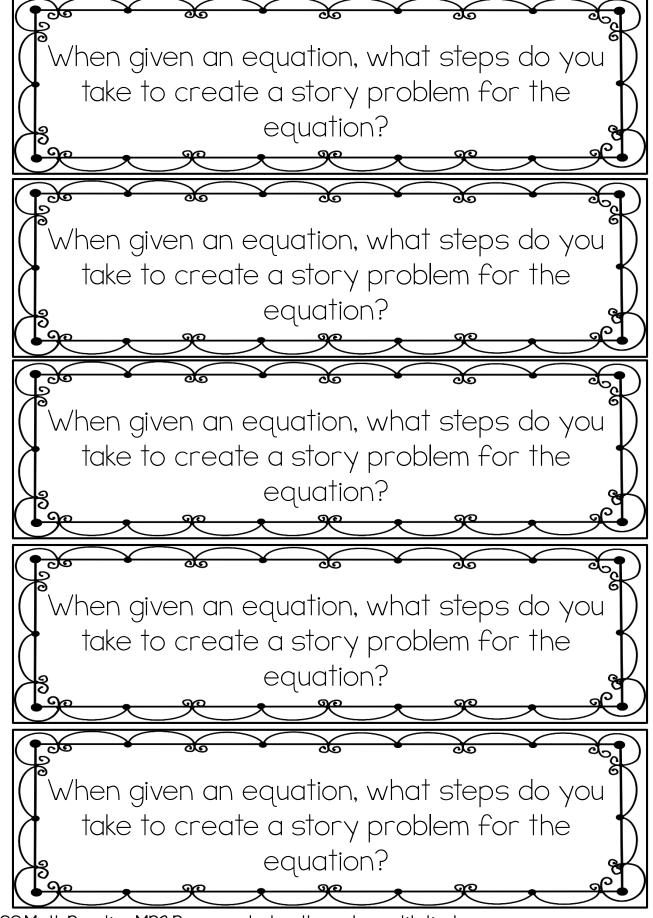
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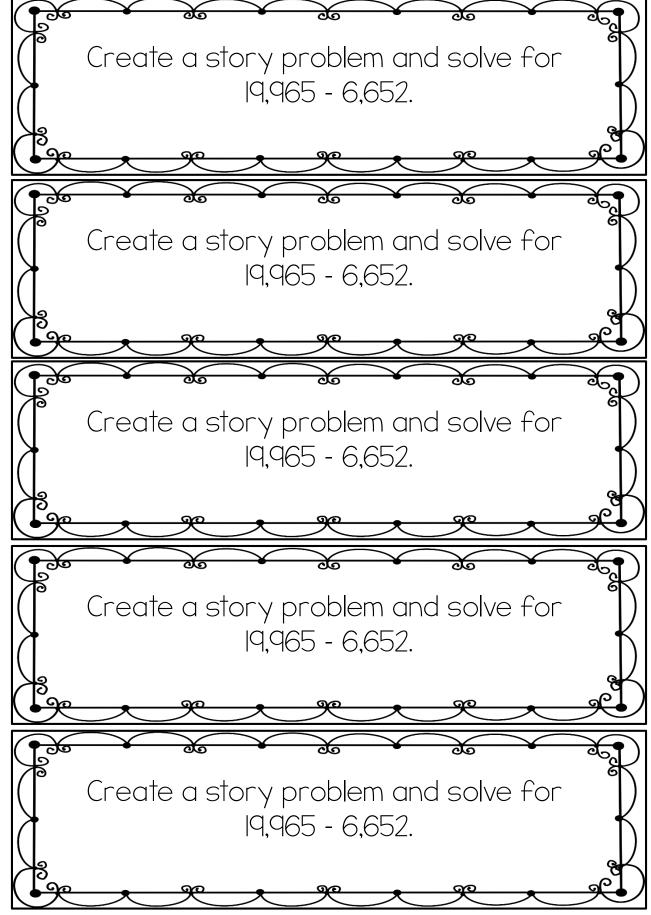
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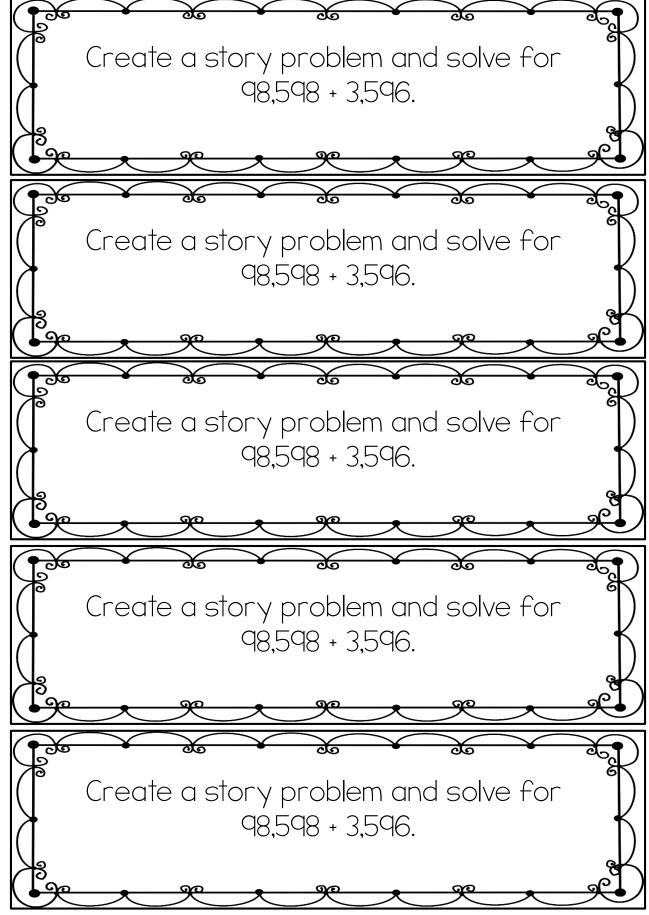
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take to create a story problem for the	
equation?	
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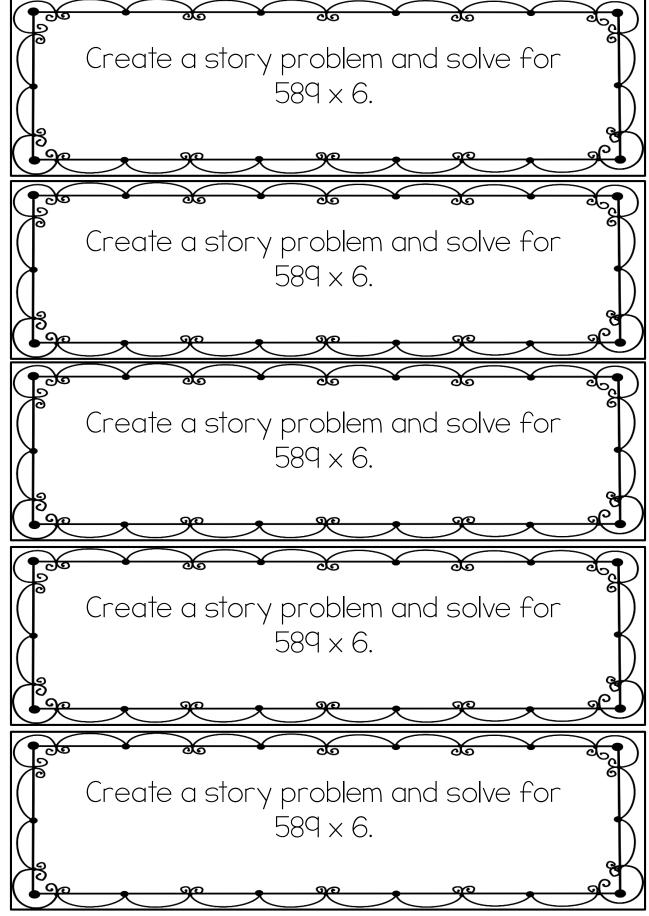


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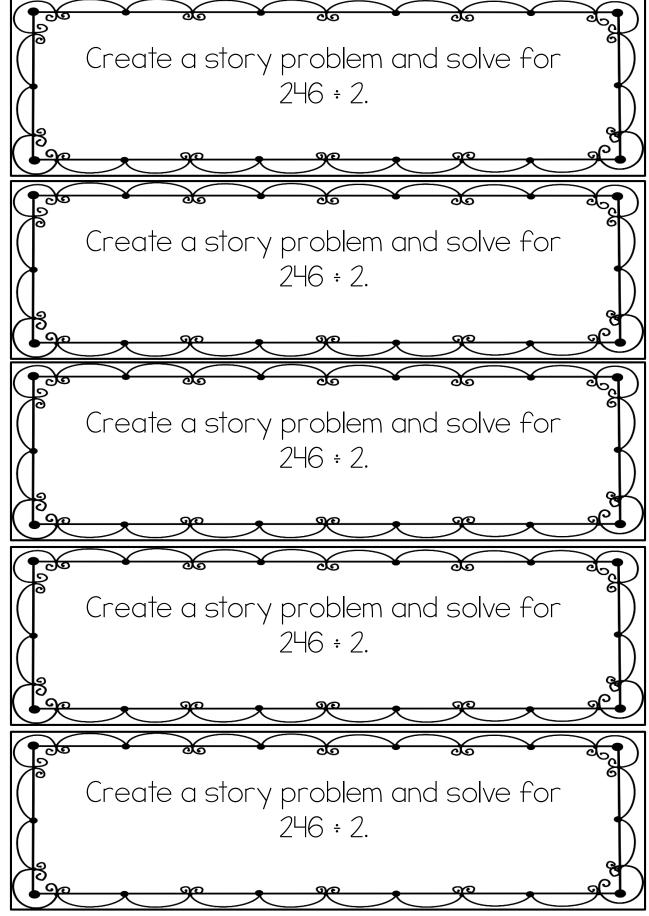
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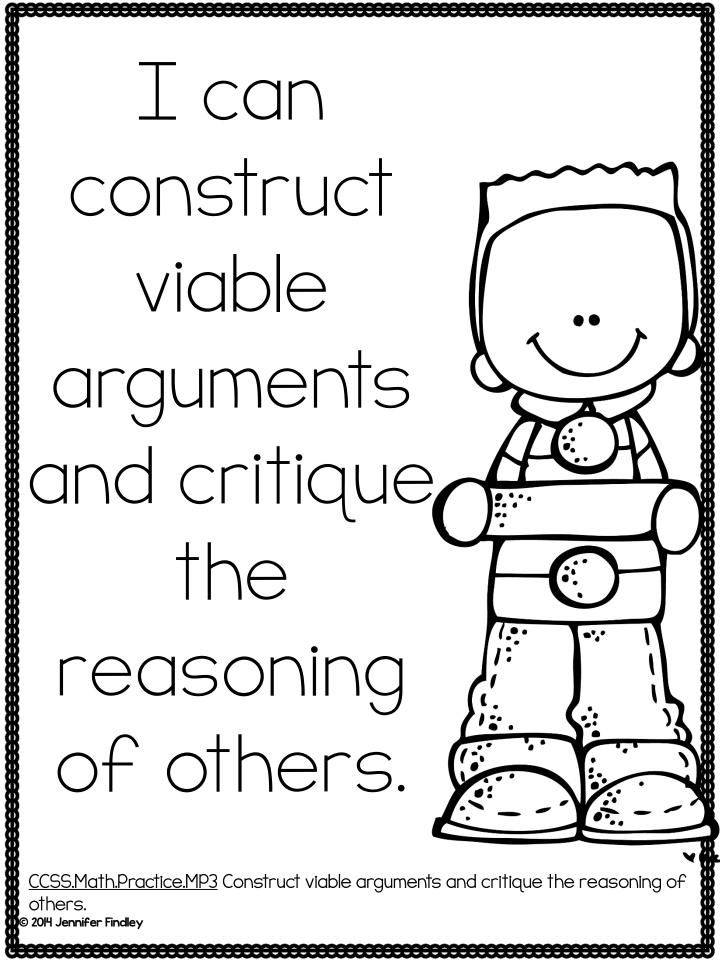


<u>CCSS.Math.Practice.MP2</u> Reason abstractly and quantitatively. © 2014 Jennifer Findley

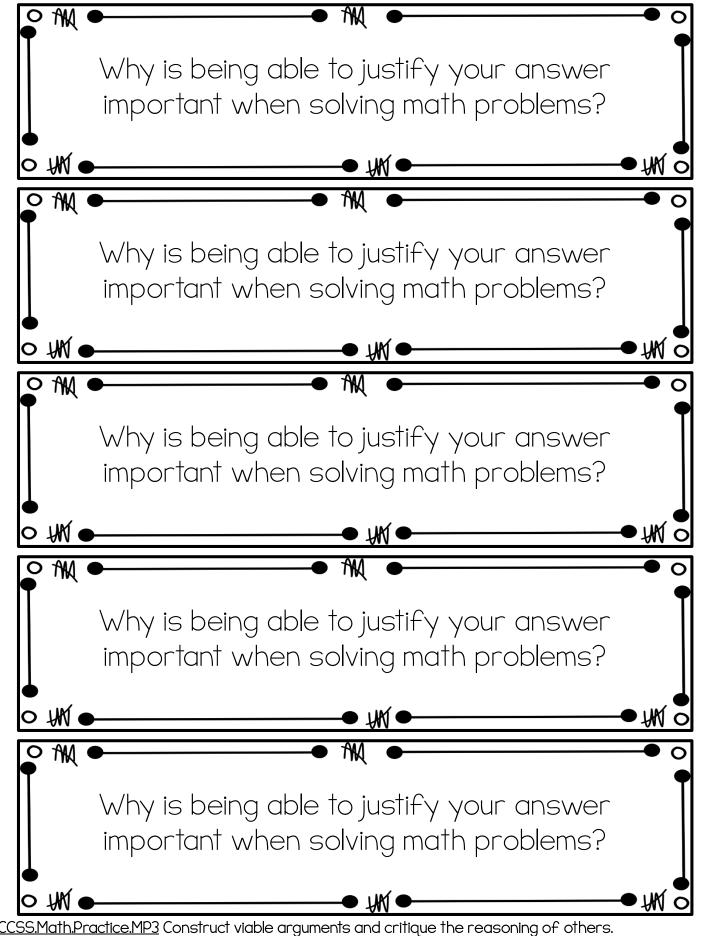
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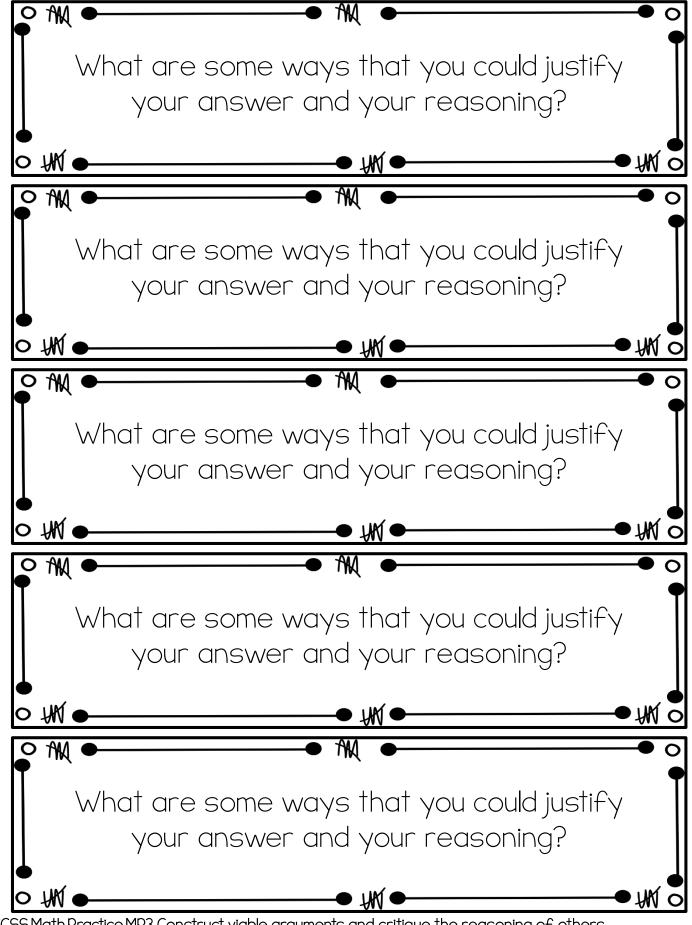
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		Why is being able to justify your answer		
		important when solving math problems?		
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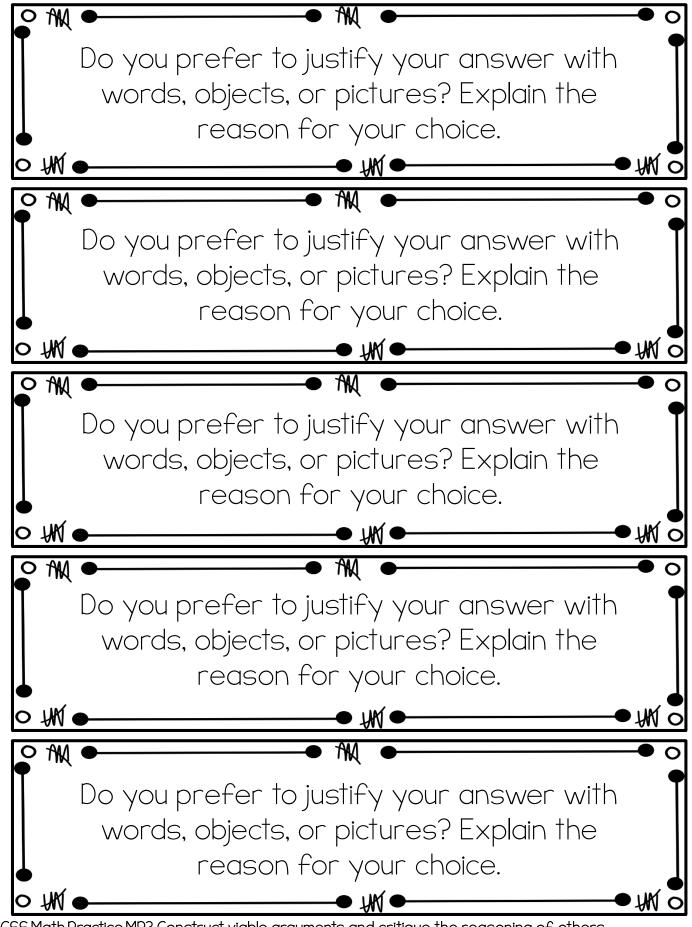
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		AMA	$\bullet TM \bullet$		
			What are some ways that you could justify your answer and your reasoning?		
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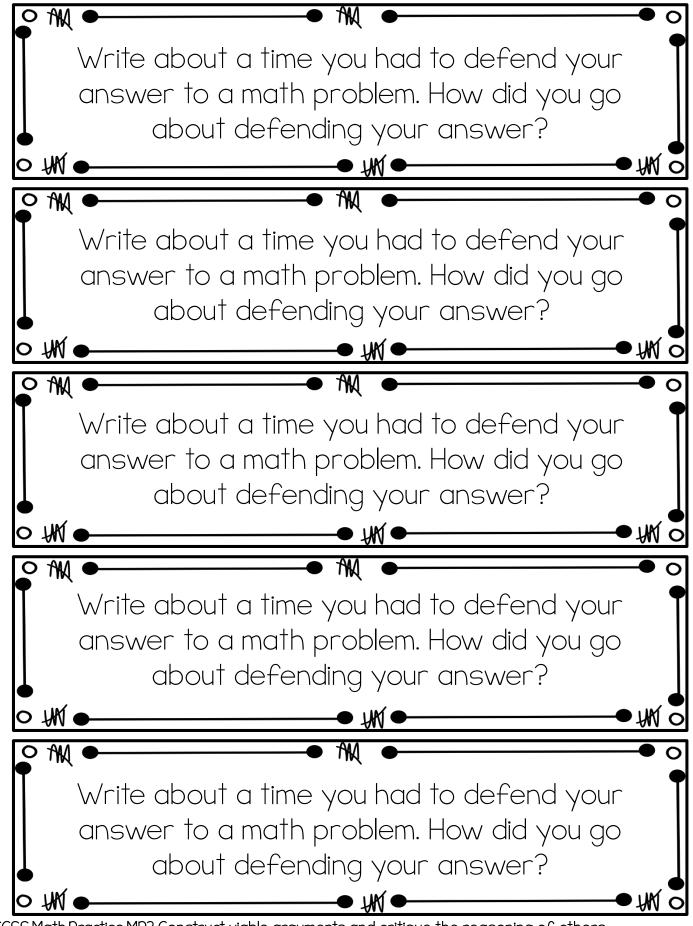
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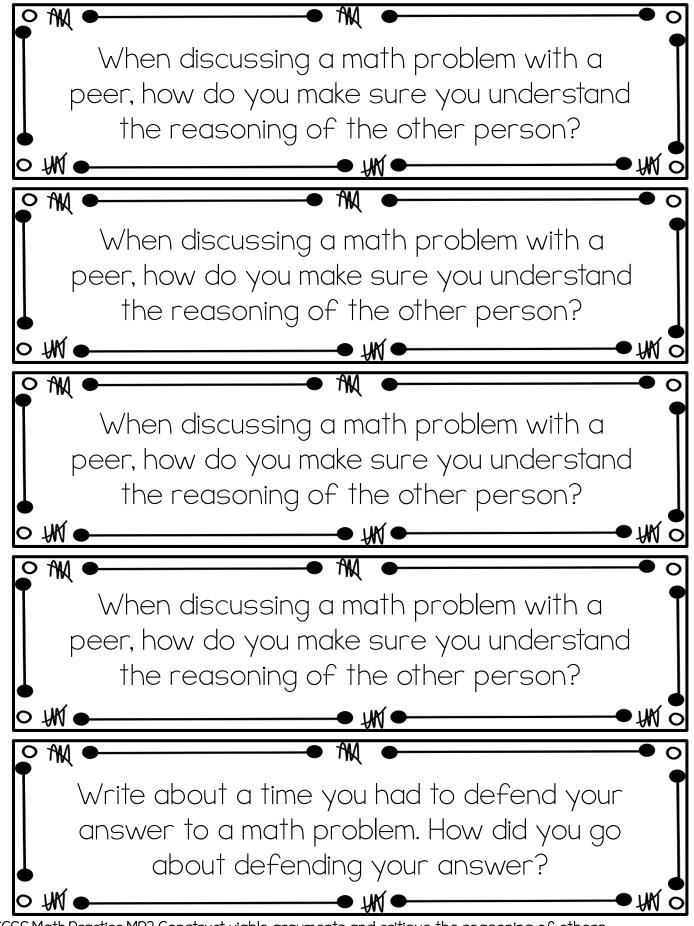
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			Do you prefer to justify your answer with	
			words, objects, or pictures? Explain the	
99999 0			reason for your choice.	
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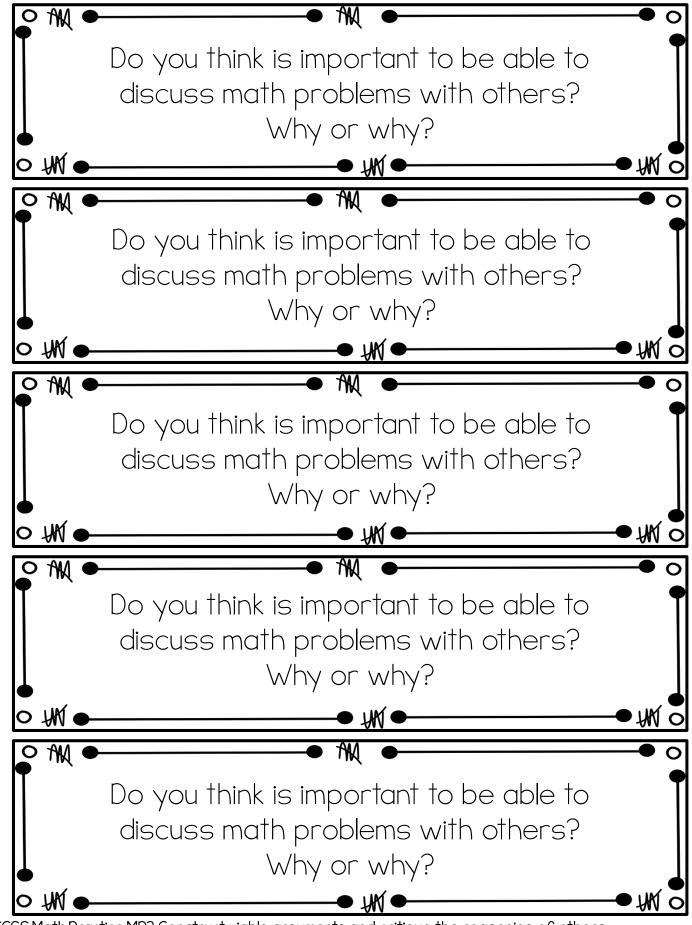
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		Write about a time you had to defend your answer to a math problem. How did you go about defending your answer?		
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	When discussing a math problem with a peer, how do you make sure you understand the reasoning of the other person?		•
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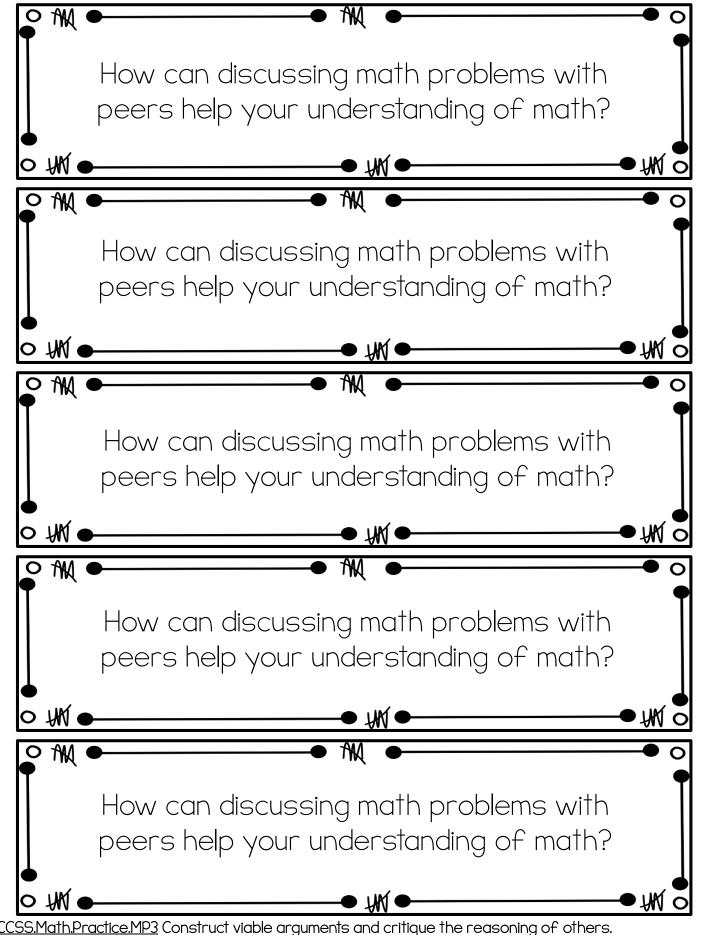


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	P		Do you think is important to be able to
×			discuss math problems with others?
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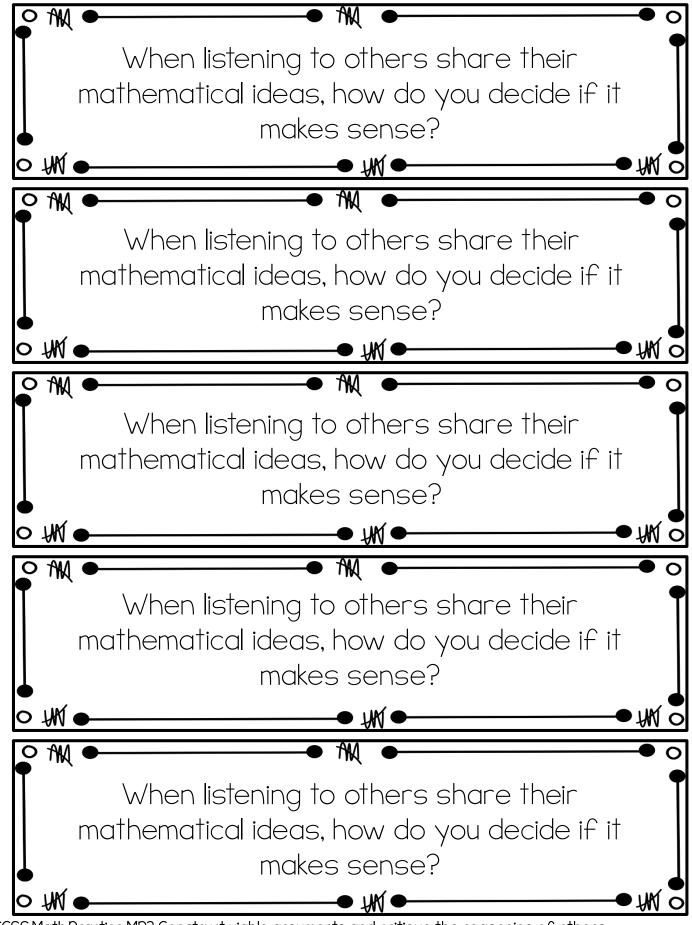


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		How can discussing math problems with		•
		peers help your understanding of math?		
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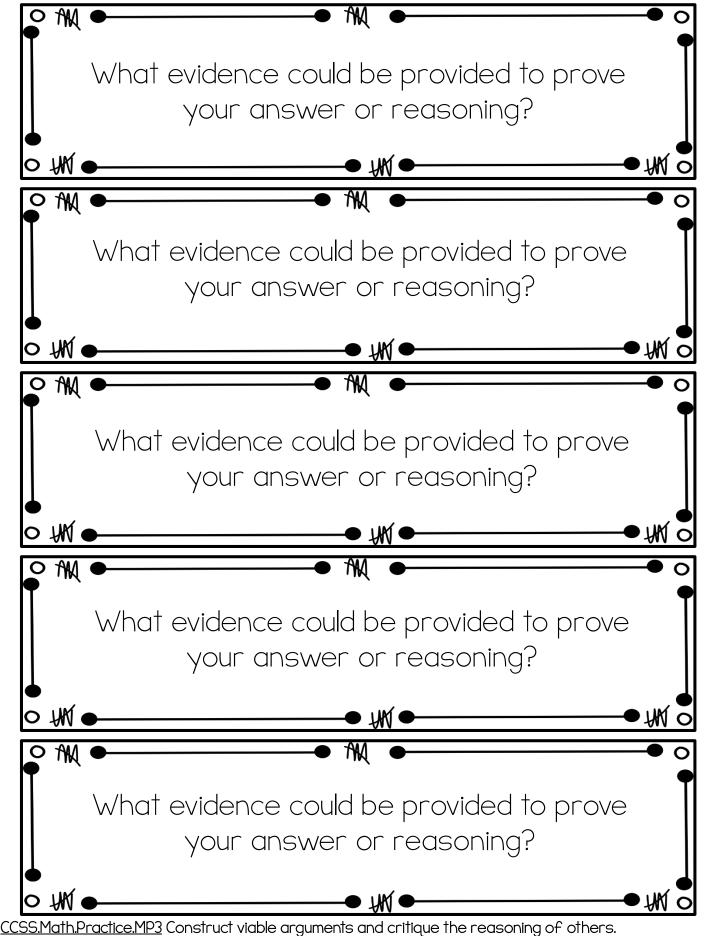


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		When listening to others share their $ extsf{T}$
		mathematical ideas, how do you decide if it
		makes sense?
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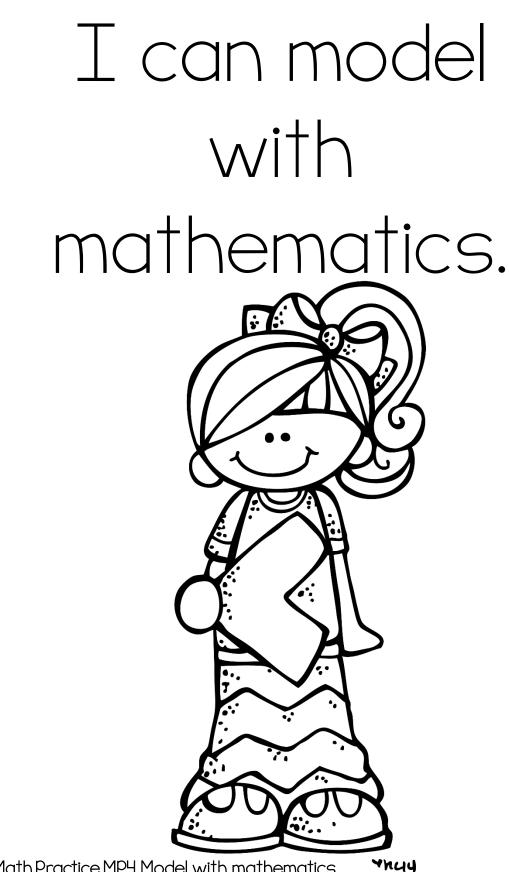


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	What evidence could be provided to prove your answer or reasoning?		
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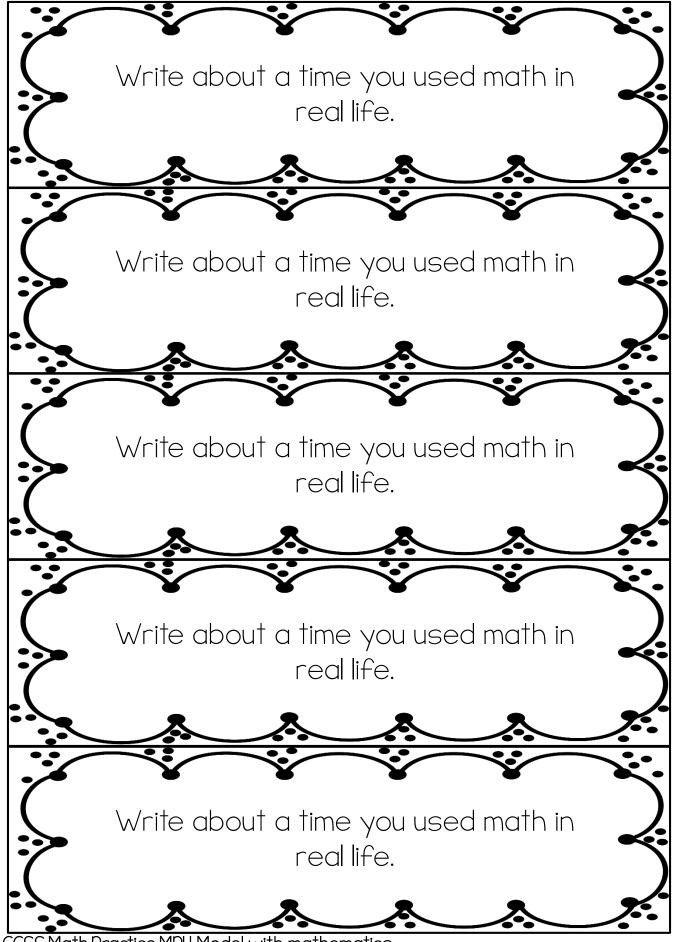
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<u>CCSS.Math.Practice.MP4</u> Model with mathematics.

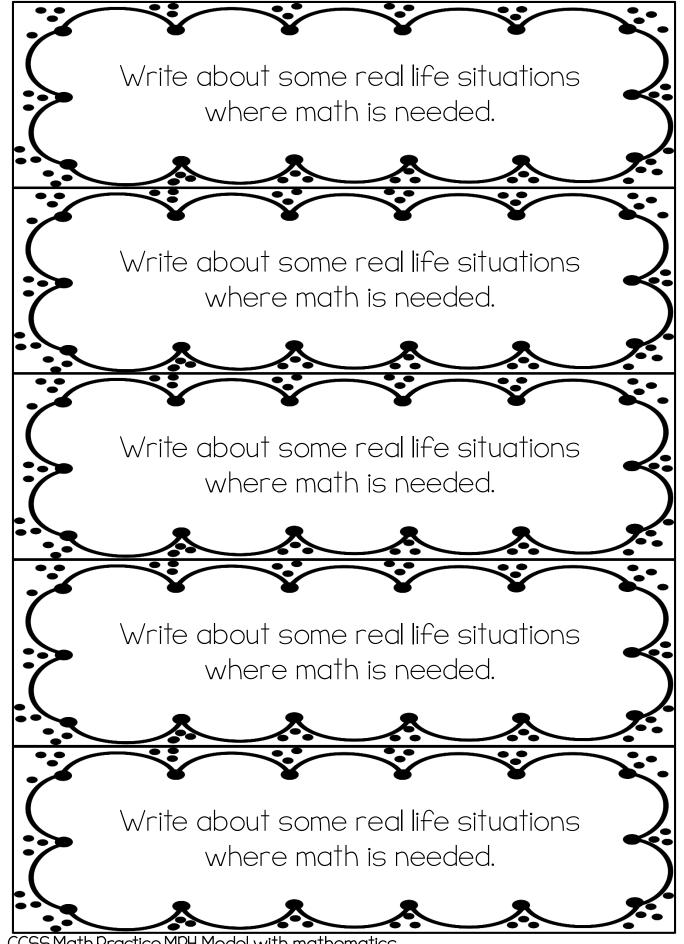
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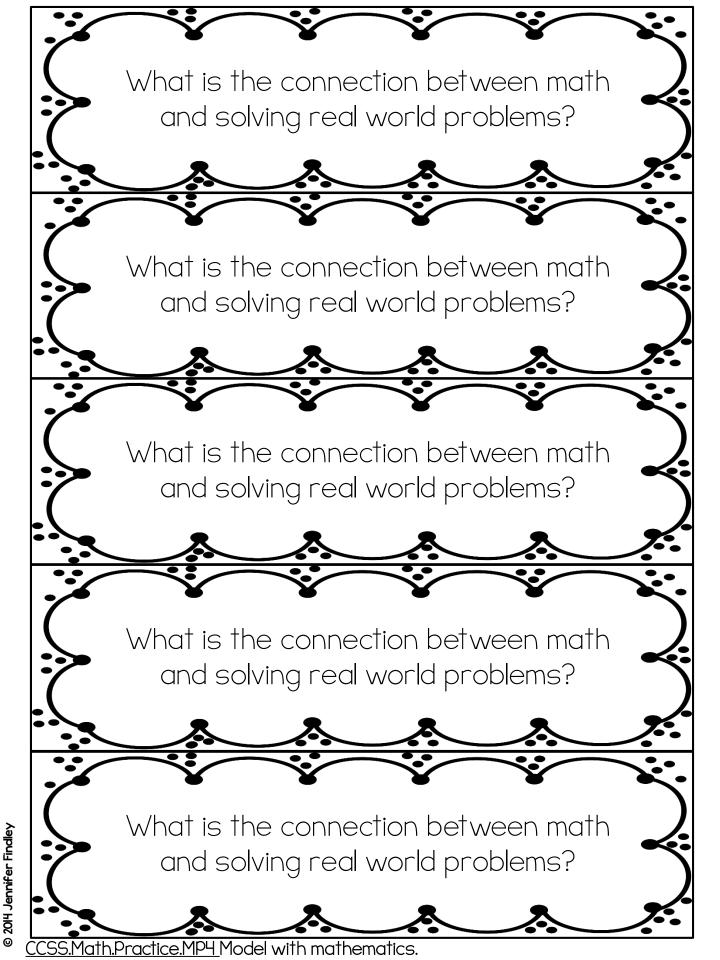


CCSS.Math.Practice.MP4 Model with mathematics.

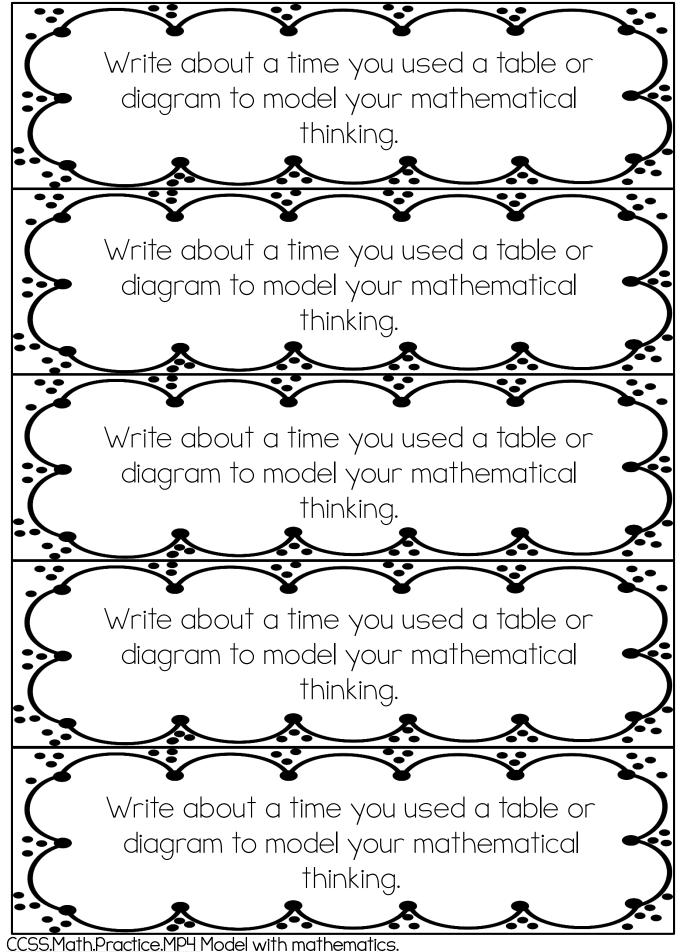
	Write about some real life situations	
	where math is needed.	
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<u>CCSS.Math.</u>	Practice.MP4 Model with mathematics.	
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What is the connection between math and solving real world problems?	$\langle \rangle$
and solving real world problems?	
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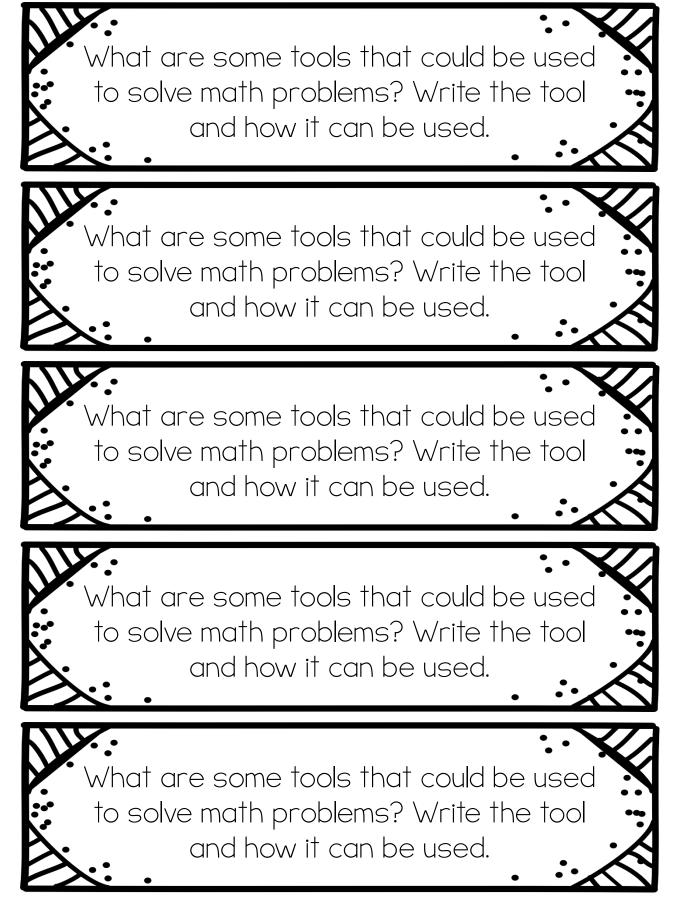
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Write about a time you used a table or diagram to model your mathematical	~		
thinking.	الجبو		
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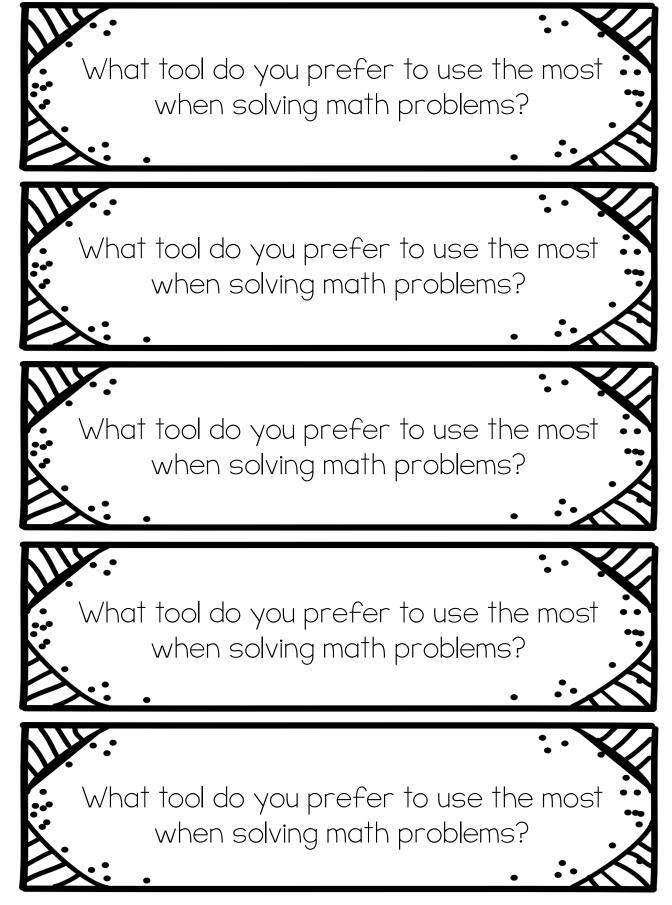


	at are some tools that could be used
•	solve math problems? Write the tool
Ś.	and how it can be used.
<u> 2:</u>	<u>. </u>
	ce.MP5 Use appropriate tools strategically.



CCSS.Math.Practice.MP5 Use appropriate tools strategically. © 2014 Jennifer Findley

···	$\cdot \cdot \mathbf{X}$
Wha	at tool do you prefer to use the most when solving math problems?
<u>`SS Math Dracti</u>	ice.MP5 Use appropriate tools strategically.



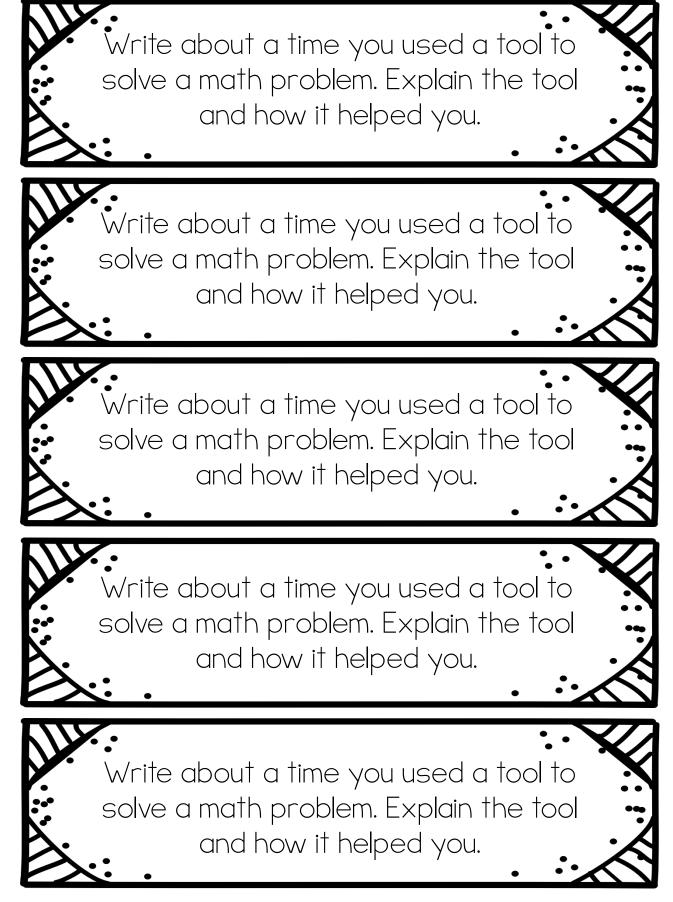
How can too	Is be used to help you solve
r K	nath problems?
<u>~~~ Math Dractice MD5 Use a</u>	ppropriate tools strategically.

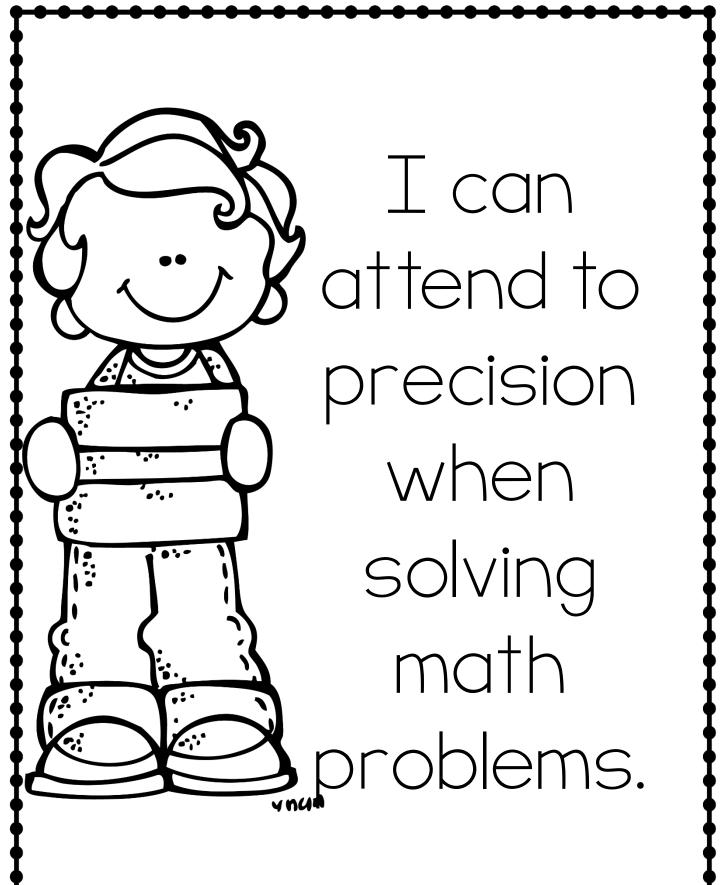


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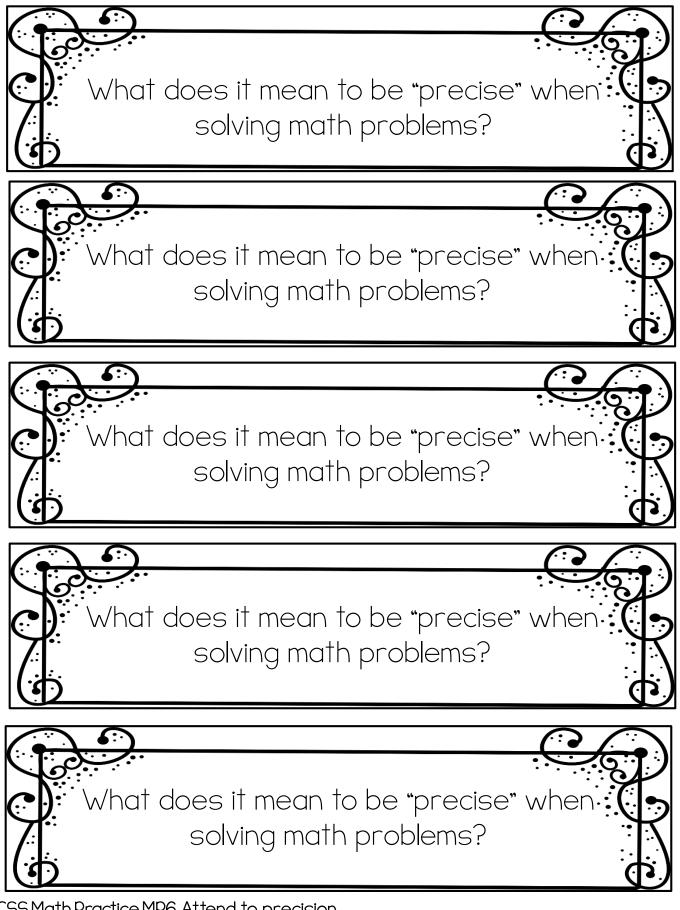
		$\cdots \mathbf{X}$
	te about a time you used a t e a math problem. Explain th and how it helped you.	
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S Math Dractice	e.MP5 Use appropriate tools strategically.	



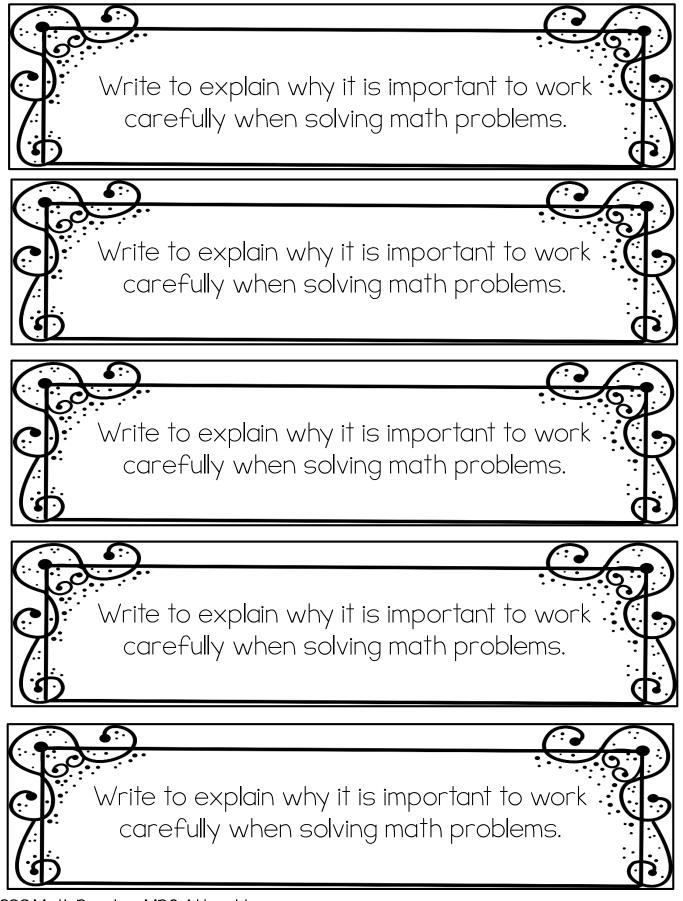


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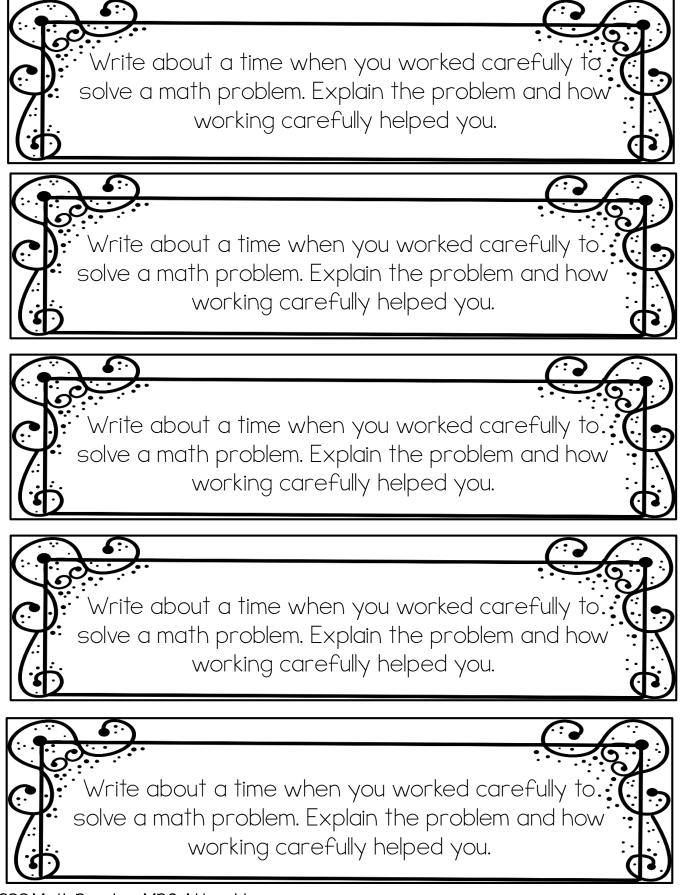
What door it mean to be "precise" when	
What does it mean to be "precise" when solving math problems?	
<u>CCSS.Math.Practice.MP6</u> Attend to precision.	



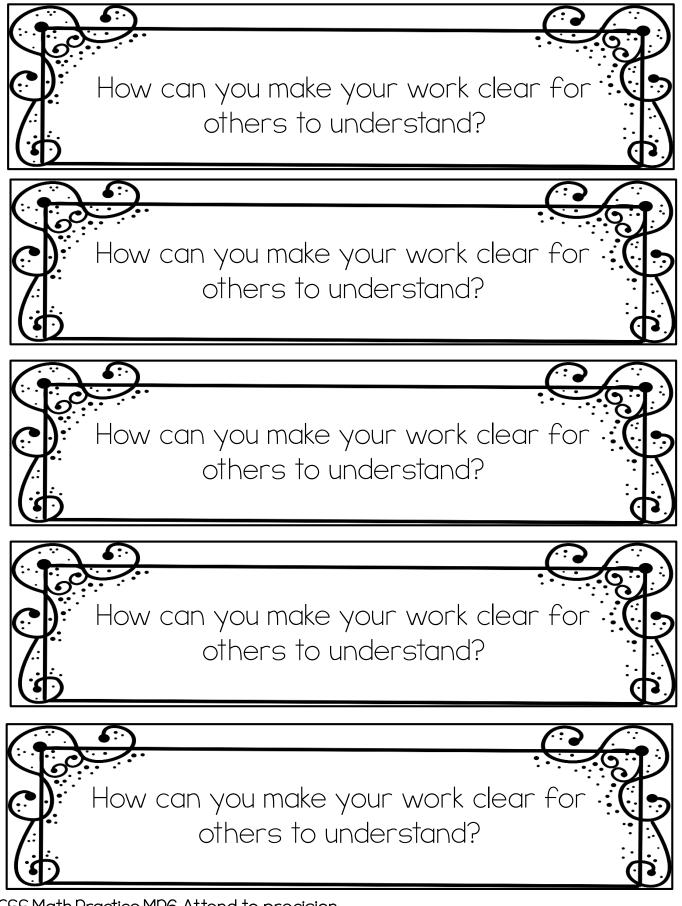
Write to explain why it is important to work carefully when solving math problems.	
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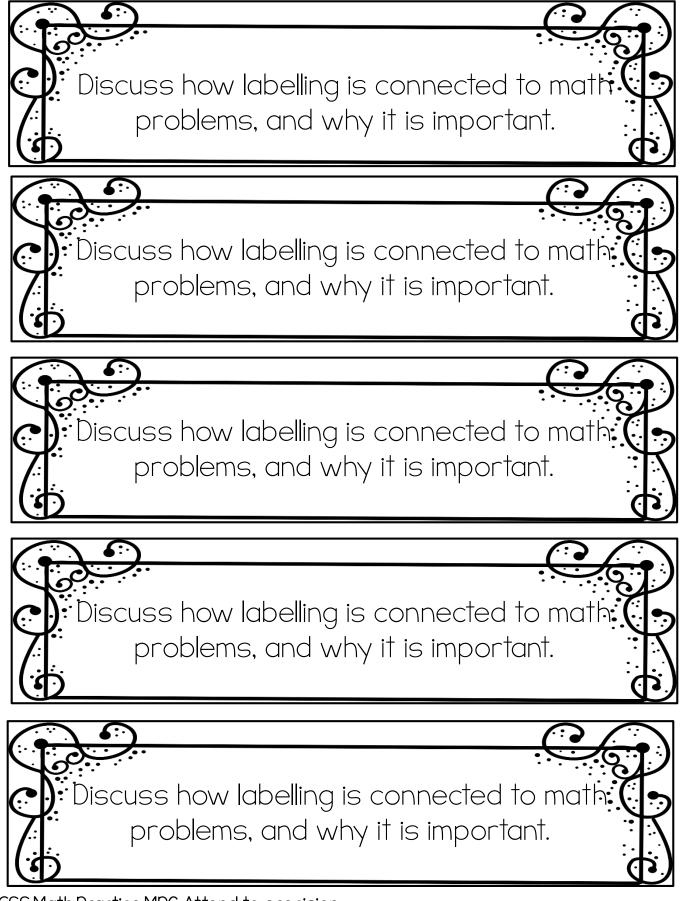
Write about a time when you worked carefully to solve a math problem.
Explain the problem and how working carefully helped you.



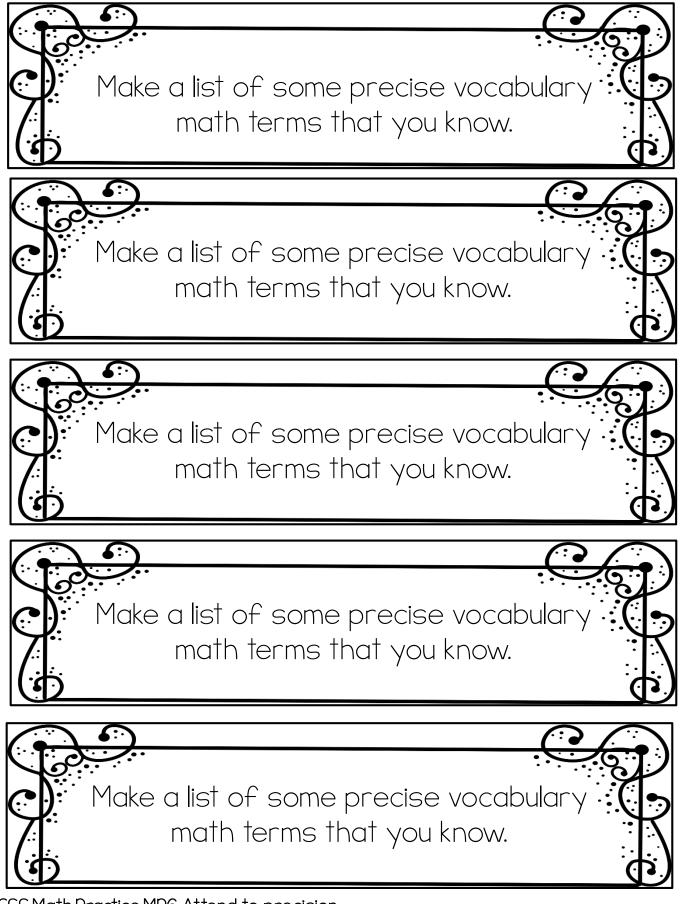
How can you make your work clear for	
others to understand?	
<u>CCSS.Math.Practice.MP6</u> Attend to precision.	



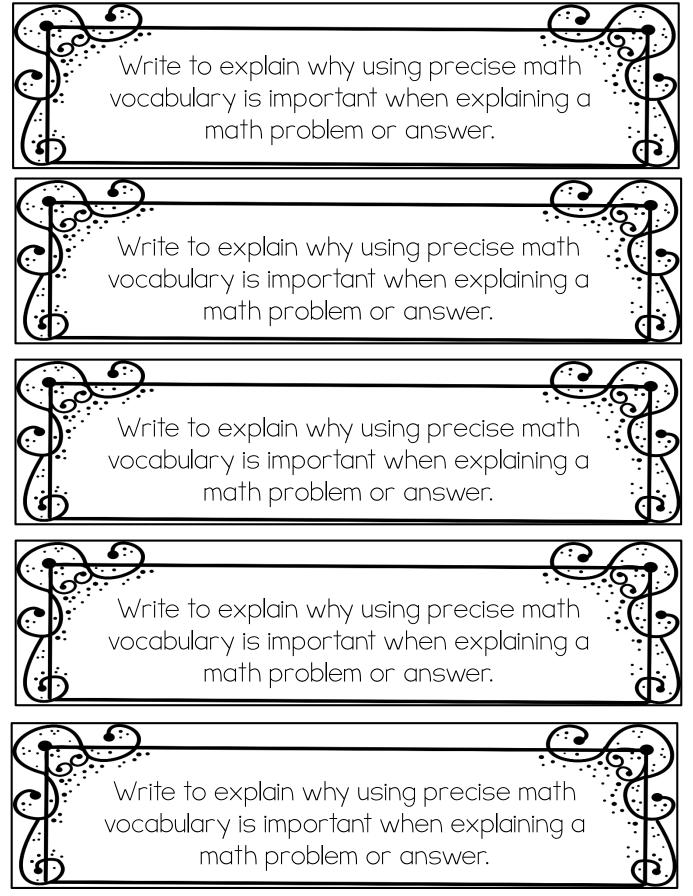
	Discuss how labelling is connected to
	math problems, and why it is important.
	у
<u></u>	<u>Practice.MP6</u> Attend to precision.

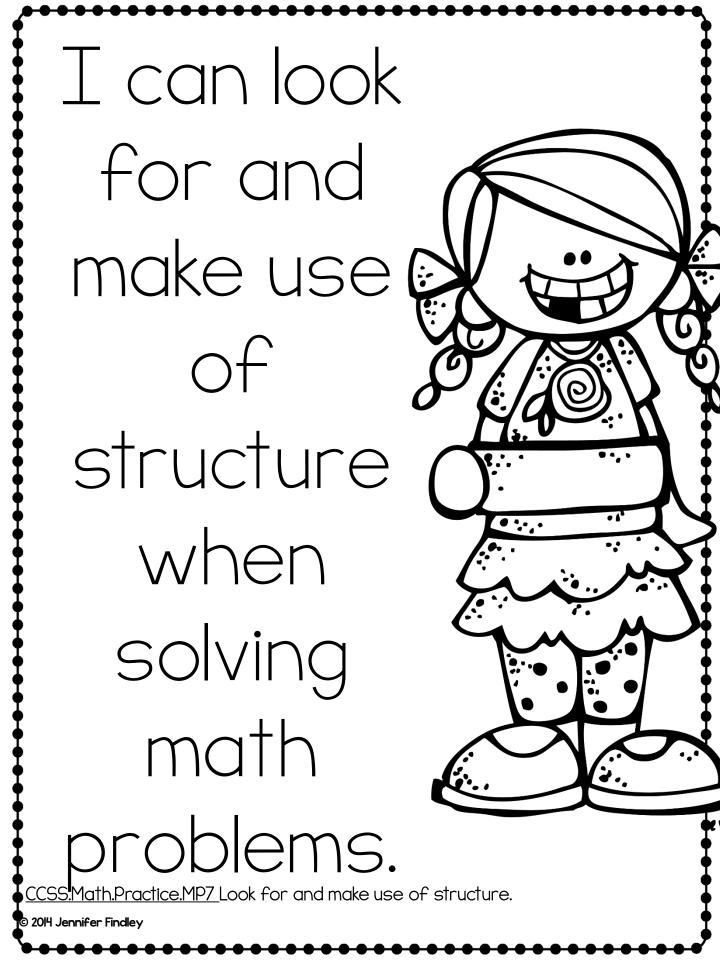


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	ake a list of some p math terms tho	
(†)		

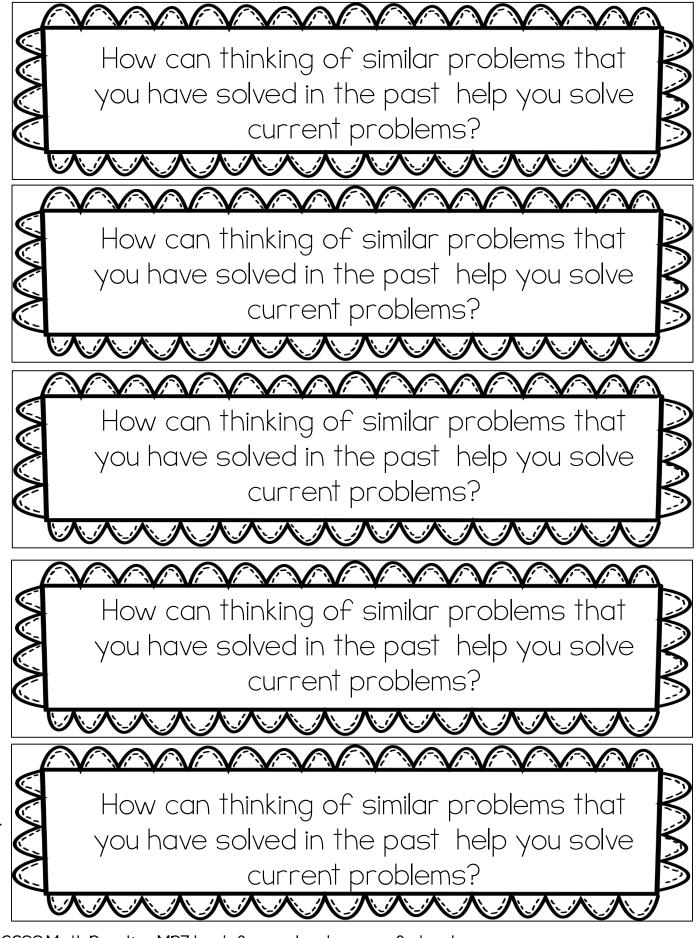


Write to explain why using precise math
vocabulary is important when explaining a math problem or answer.





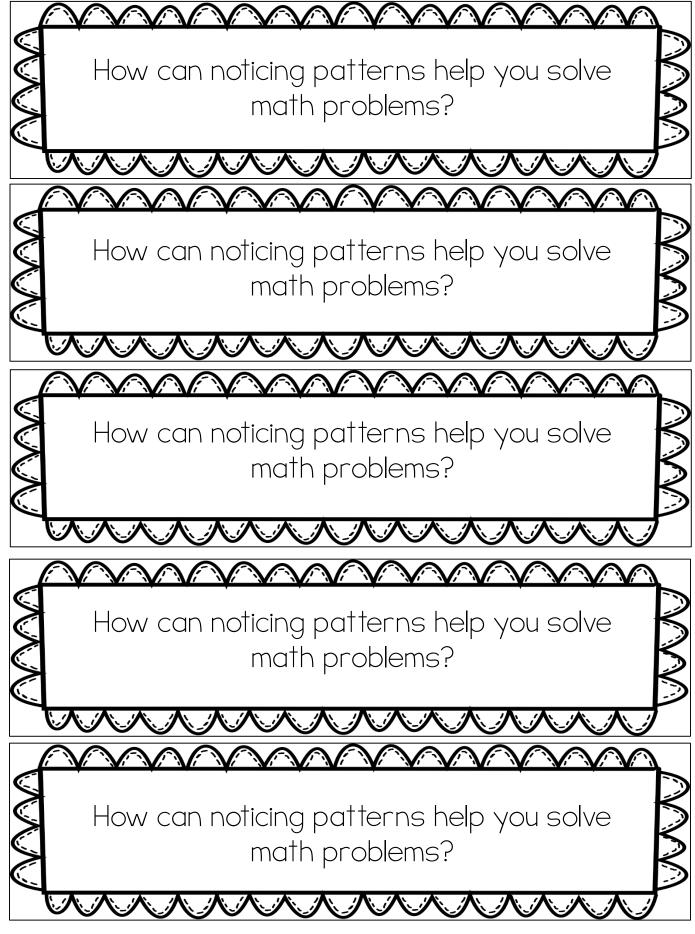
	How can thinking of similar problems that
	you have solved in the past help you solve current problems?
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<u>CCSS.Math.Practice.MP7</u> Look for and make use of structure.

Jennifer Findley

	How can noticing patterns help you solve
	math problems?
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	<u>SS.Math.Practice.MP7</u> Look for and make use of structure.

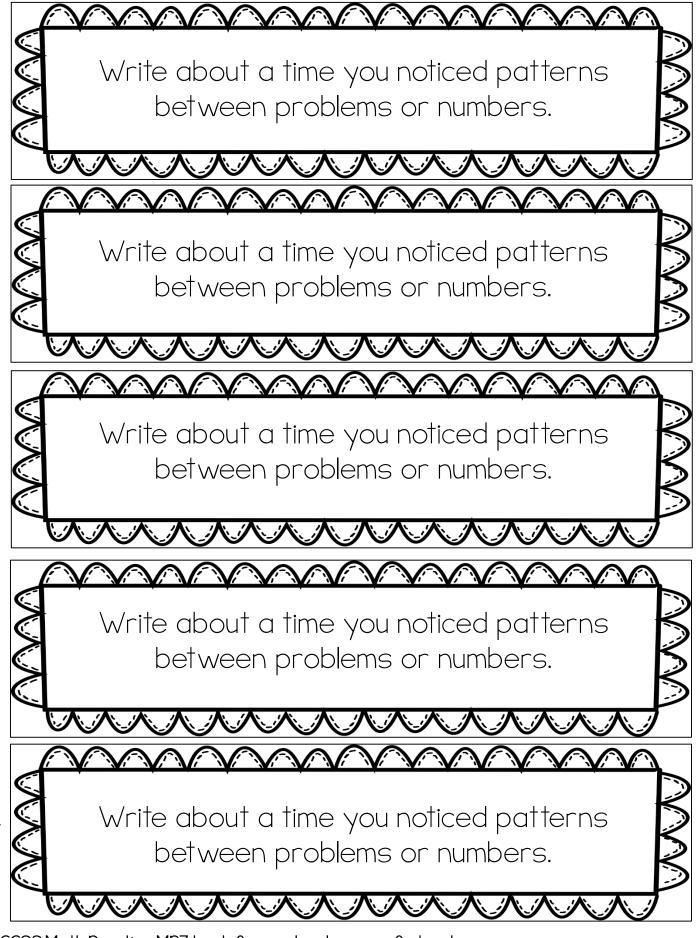


©CCSS.Math.Practice.MP7 Look for and make use of structure.

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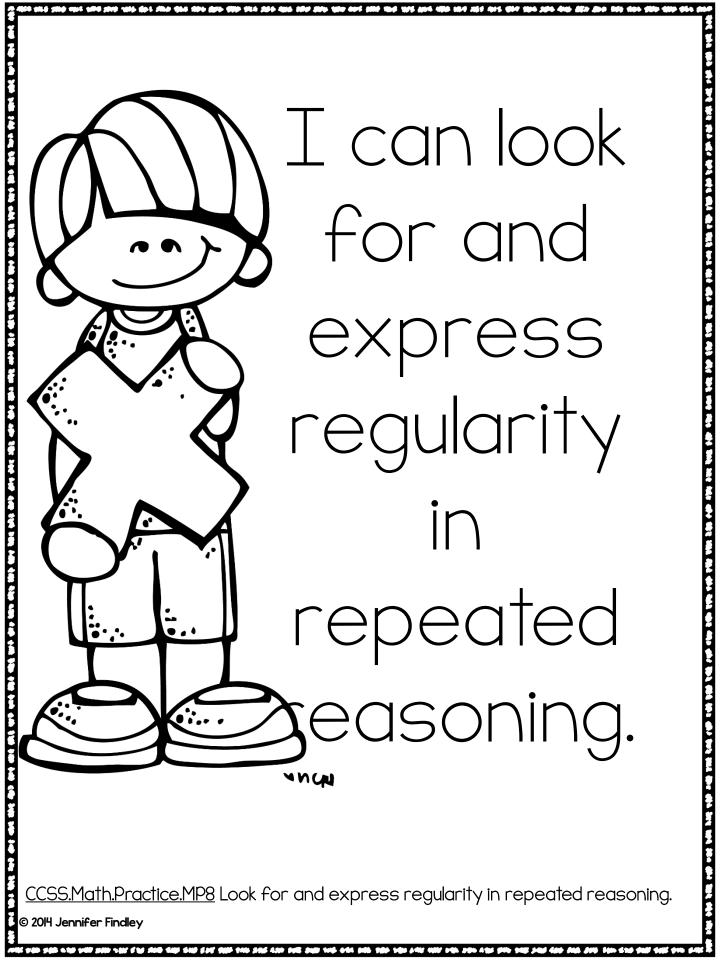
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	Write about a time you noticed patterns
	between problems or numbers.
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	<u>65.Math.Practice.MP7</u> Look for and make use of structure. I Jennifer Findley

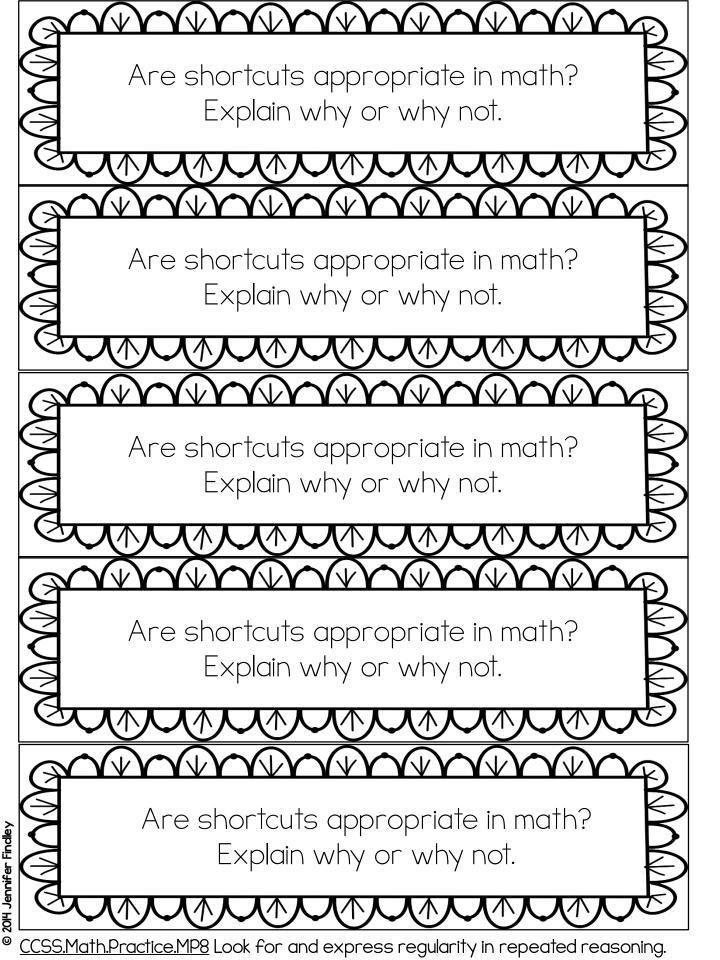


[©]CCSS.Math.Practice.MP7 Look for and make use of structure.

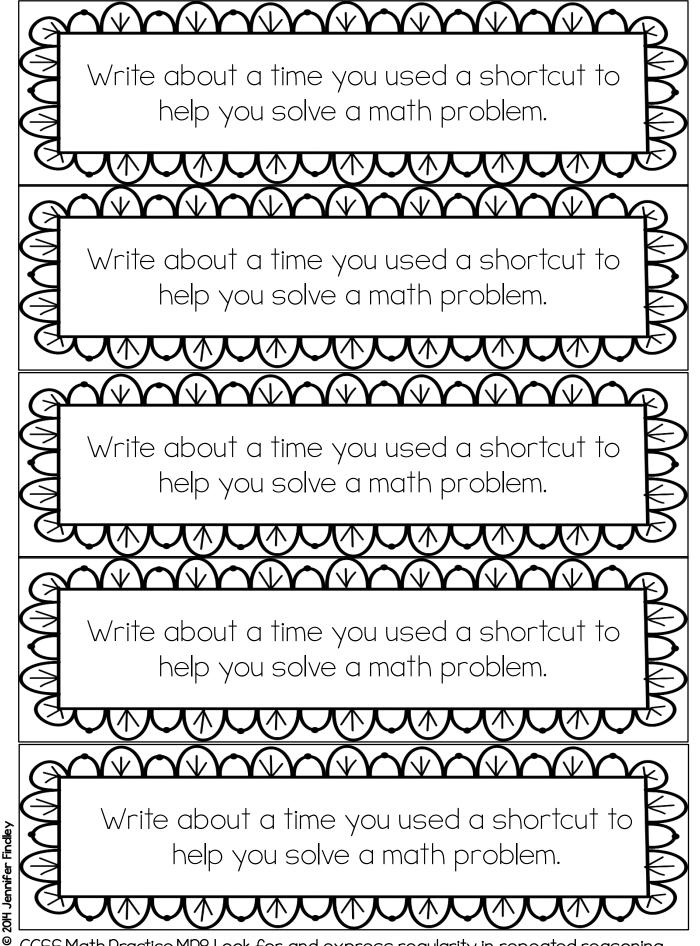
Jennifer Findlev



Are shortcuts appropriate in math?
S Explain why or why not. R
$(\exists $
<u>CCSS.Math.Practice.MP8</u> Look for and express regularity in repeated reasoning.
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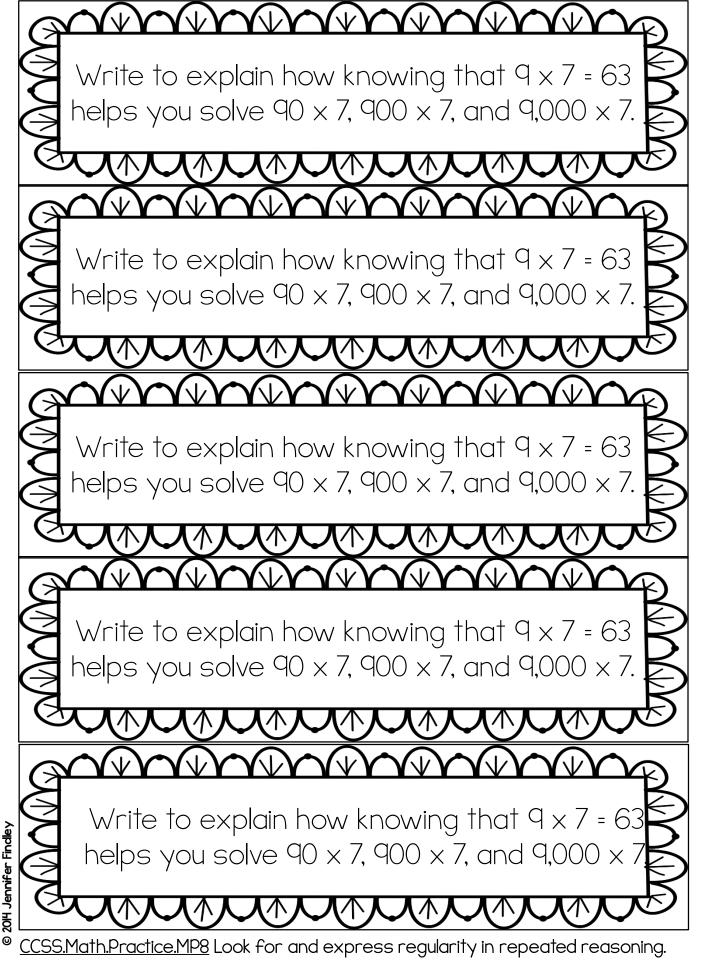


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Θ Write about a time you used a shortcut to \mathbb{R}	3
help you solve a math problem.	5
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<u>CCSS.Math.Practice.MP8</u> Look for and express regularity in repeated reasoning	
<u>CCSS.Math.Practice.MP8</u> Look for and express regularity in repeated reasoning © 2014 Jennifer Findley	•



<u>CCSS.Math.Practice.MP8</u> Look for and express regularity in repeated reasoning.

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Я К
Write to explain how knowing that $9 \times 7 = 63$
\square helps you solve 90 x 7, 900 x 7, and 9,000 x 7. \square
<u>CCSS.Math.Practice.MP8</u> Look for and express regularity in repeated reasoning.
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CHOICE BOARDS

Black and White Version: These could be printed and given to the students to write on. Students could color in the box of the choice they have completed. This will allow students to keep track of which choices have been completed and which are left.

<u>Color Version</u>: These could be printed on card stock, laminated, and used in a math center.

MP.I CHOICE BOARD

How did you make sense of the problem? What helped you persevere in solving the problem? How do you know your answer makes sense?

What is a simpler problem that could have helped you solve this problem? Is there another way you could have solved this problem? Describe the problem in your own words.

MP.I CHOICE BOARD

How did you make sense of the problem? What helped you persevere in solving the problem?

What is a simpler problem that could have helped you solve this problem? Is there another way you could have solved this problem? How do you know your answer makes sense?

Describe the problem in your own words.

CCSS.Math.Practice.MPI Make sense of problems and persevere in solving them.

MP.I CHOICE BOARD

How did you make sense of the problem?	What helped you persevere in solving the problem?	How do you know your answer makes sense?
What is a simpler problem that could have helped you solve this problem?	Is there another way you could have solved this problem?	Describe the problem in your own words.

MP.I CHOICE BOARD

How did you	What helped	How do you
make sense of the problem?	you persevere	know your answer makes
	in solving the problem?	sense?
What is a simpler problem that could have helped you solve this problem?	Is there another way you could have solved this problem?	Describe the problem in your own words.

<u>CCSS.Math.Practice.MPI</u> Make sense of problems and persevere in solving them.

MP.2 CHOICE BOARD

How did you make sense of the numbers and their relationship?	How did you know how to represent the word problem with the equation you wrote?	Explain how your equation matches the problem.
Explain how your answer refers back to the word problem.	Explain what the numbers in the problem mean.	Draw a picture to show how the numbers are related.

MP.2 CHOICE BOARD

How did you make sense of the numbers and their relationship?	How did you know how to represent the word problem with the equation you wrote?	Explain how your equation matches the problem.
Explain how your answer refers back to the word problem.	Explain what the numbers in the problem mean.	Draw a picture to show how the numbers are related.

CCSS.Math.Practice.MP2 Reason abstractly and quantitatively.

MP.2 CHOICE BOARD

How did you make sense of the numbers and their relationship?	How did you know how to represent the word problem with the equation you wrote?	Explain how your equation matches the problem.
Explain how your answer refers back to the word problem.	Explain what the numbers in the problem mean.	Draw a picture to show how the numbers are related.

MP.2 CHOICE BOARD

How did you make sense of the numbers and their relationship?	How did you know how to represent the word problem with the equation you wrote?	Explain how your equation matches the problem.
Explain how your answer refers back to the word problem.	Explain what the numbers in the problem mean.	Draw a picture to show how the numbers are related.

<u>CCSS.Math.Practice.MP2</u> Reason abstractly and quantitatively.

MP.3 CHOICE BOARD

In 2-3 sentences, defend your answer.	Discuss your answer with a partner. Justify your answer while you are discussing the problem.	Use drawings, diagrams, or another visual to justify your answer.
Trade papers with a partner and make sense of each other's reasoning.	What mathematical evidence supports your answer?	Describe the strategy you used to solve the problem. Explain why you used that strategy.

MP.3 CHOICE BOARD

In 2-3 sentences, defend your answer.	Discuss your answer with a partner. Justify your answer while you are discussing the problem.	Use drawings, diagrams, or another visual to justify your answer.
Trade papers with a partner and make sense of each other's reasoning.	What mathematical evidence supports your answer?	Describe the strategy you used to solve the problem. Explain why you used that strategy.

CCSS.Math.Practice.MP3 Construct viable arguments and critique the reasoning of others.

MP,3 CHOICE BOARD		
In 2-3 sentences, defend your answer.	Discuss your answer with a partner. Justify your answer while you are discussing the problem.	Use drawings, diagrams, or another visual to justify your answer.
Trade papers with a partner and make sense of each other's reasoning.	What mathematical evidence supports your answer?	Describe the strategy you used to solve the problem. Explain why you used that strategy.

	CHOICE B	OARD
In 2-3 sentences, defend your answer.	Discuss your answer with a partner. Justify your answer while you are discussing the problem.	Use drawings, diagrams, or another visual to justify your answer.
Trade papers with a partner and make sense of each other's reasoning.	What mathematical evidence supports your answer?	Describe the strategy you used to solve the problem. Explain why you used that strategy.

<u>CCSS.Math.Practice.MP3</u> Construct viable arguments and critique the reasoning of others.

MP.4 CHOICE BOARD

Explain the real world connection of your problem. Create another problem with the same operation or equation as the one you just solved.

How did you decide what equation to use to solve the problem? Is there another way you could have solved the problem? Explain. Create another problem with a similar situation or context as the one you just solved.

How does the model you used connect back to the problem?

MP.4 CHOICE BOARD

Explain the real world connection of your problem.	Create another problem with the same operation or equation as the one you just solved.	Create another problem with a similar situation or context as the one you just solved.
How did you decide what equation to use to solve the problem?	Is there another way you could have solved the problem? Explain.	How does the model you used connect back to the problem?

<u>CCSS.Math.Practice.MP4</u> Model with mathematics.

MP.4 CHOICE BOARD

Explain the real world connection of your problem.	Create another problem with the same operation or equation as the one you just solved.	Create another problem with a similar situation or context as the one you just solved.
How did you decide what equation to use to solve the problem?	Is there another way you could have solved the problem? Explain.	How does the model you used connect back to the problem?

MP.4 CHOICE B	OARD
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Explain the real world connection of your problem.	Create another problem with the same operation or equation as the one you just solved.	Create another problem with a similar situation or context as the one you just solved.
How did you decide what equation to use to solve the problem?	Is there another way you could have solved the problem? Explain.	How does the model you used connect back to the problem?

<u>CCSS.Math.Practice.MP4</u> Model with mathematics.

MP.5 CHOICE BOARD

What tool(s) did you use to solve the problem?

Describe another tool that could be used to solve the problem.

Discuss the problem with a partner. Did they use the same tool as you? Would paper and pencil computation or manipulatives have been more effective with this problem? Explain your choice. Describe a tool that would not have been effective at solving the problem.

Write to prove that the tool you chose to use to solve the problem was the most effective.

MP.5 CHOICE BOARD

What tool(s) did you use to solve the problem?	Describe another tool that could be used to solve the problem.	Describe a tool that would not have been effective at solving the problem.
Discuss the problem with a partner. Did they use the same tool as you?	Would paper and pencil computation or manipulatives have been more effective with this problem? Explain your choice.	Write to prove that the tool you chose to use to solve the problem was the most effective.

CCSS.Math.Practice.MP5 Use appropriate tools strategically.

	MP.5 CHOICE BOA	RD
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What tool(s) did you use to solve the problem?	Describe another tool that could be used to solve the problem.	Describe a tool that would not have been effective at solving the problem.
Discuss the problem with a partner. Did they use the same tool as you?	Would paper and pencil computation or manipulatives have been more effective with this problem? Explain your choice.	Write to prove that the tool you chose to use to solve the problem was the most effective.

MP.5 CHOICE BO

What tool(s) did you use to solve the problem?	Describe another tool that could be used to solve the problem.	Describe a tool that would not have been effective at solving the problem.
Discuss the problem with a partner. Did they use the same tool as you?	Would paper and pencil computation or manipulatives have been more effective with this problem? Explain your choice.	Write to prove that the tool you chose to use to solve the problem was the most effective.

CCSS.Math.Practice.MP5 Use appropriate tools strategically.

MP.6 CHOICE BOARD

What math terms would you use to discuss this problem with a partner?

How did you ensure your answer was accurate and precise?

In 2-3 sentences, explain the <u>math</u> <u>problem</u> using clear math terms and definitions. How are you showing the meanings of the quantities? In 2-3 sentences, explain the <u>equation you</u> <u>wrote</u> using clear math terms and definitions.

How did you show that your solution answer the problem?

MP.6 CHOICE BOARD

What math terms would you use to discuss this problem with a partner?	How did you ensure your answer was accurate and precise?	In 2-3 sentences, explain the <u>equation you</u> <u>wrote</u> using clear math terms and
		definitions.
In 2-3 sentences, explain the <u>math</u> <u>problem</u> using clear math terms and definitions.	How are you showing the meanings of the quantities?	How did you show that your solution answer the problem?

CCSS.Math.Practice.MP6 Attend to precision.

MP.6	CHOICE B	OARD
What math terms would you use to discuss this problem with a partner?	How did you ensure your answer was accurate and precise?	In 2-3 sentences, explain the <u>equation you</u> <u>wrote</u> using clear math terms and definitions.
In 2-3 sentences, explain the <u>math</u> <u>problem</u> using clear math terms and definitions.	How are you showing the meanings of the quantities?	How did you show that your solution answer the problem?

MP.6	CHOICE B	OARD
What math terms would you use to discuss this problem with a partner?	How did you ensure your answer was accurate and precise?	In 2-3 sentences, explain the <u>equation you</u> <u>wrote</u> using clear math terms and definitions.
In 2-3 sentences, explain the <u>math</u> <u>problem</u> using clear math terms and definitions.	How are you showing the meanings of the quantities?	How did you show that your solution answer the problem?

<u>CCSS.Math.Practice.MP6</u> Attend to precision.

NP.7-8 CHOICE BOARD

What pattern(s) did you notice in your problem?	Were you able to use a shortcut to help you solve the problem? Explain.	What did you notice or learn from this problem that could help you solve future problems?
What previously learned ideas helped you solve this problem?	Were you able to break the problem into smaller problems to solve?	Is there a mathematical rule that you used to help you solve the problem?

MP.7-8 CHOICE BOARD

What pattern(s) did you notice in your problem?	Were you able to use a shortcut to help you solve the problem? Explain.	What did you notice or learn from this problem that could help you solve future problems?
What previously learned ideas helped you solve this problem?	Were you able to break the problem into smaller problems to solve?	Is there a mathematical rule that you used to help you solve the problem?

<u>CCSS.Math.Practice.MP7</u> Look for and make use of structure. <u>CCSS.Math.Practice.MP8</u> Look for and express regularity in repeated reasoning.

MP.7-8 CHOICE BOARD

What pattern(s) did you notice in your problem?	Were you able to use a shortcut to help you solve the problem? Explain.	What did you notice or learn from this problem that could help you solve future problems?
What previously learned ideas helped you solve this problem?	Were you able to break the problem into smaller problems to solve?	Is there a mathematical rule that you used to help you solve the problem?

MP.7-8 CHOI	CE BOARD
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What pattern(s) did you notice in your problem?	Were you able to use a shortcut to help you solve the problem? Explain.	What did you notice or learn from this problem that could help you solve future problems?
What previously learned ideas helped you solve this problem?	Were you able to break the problem into smaller problems to solve?	Is there a mathematical rule that you used to help you solve the problem?

<u>CCSS.Math.Practice.MP7</u> Look for and make use of structure.

<u>CCSS.Math.Practice.MP8</u> Look for and express regularity in repeated reasoning.

If you like this resource, make sure you check out my other Common Core Aligned Resources.

Sommon Core Resources for 3rd-5th Grade

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<u>Credits</u>: <u>Striped Elephant</u> <u>KG Fonts</u>

