Name:_____ Teacher:_____ Grade:_____

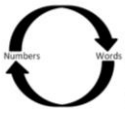
Grades 1-2 January MATH CHALLENGE

Your challenge is to use your problem solving skills to solve these two problems. There are MANY ways to work on these. ***Be sure to show your thinking using pictures, number, and/or words.*** ***Due: January 26, 2017***

The movie theater has 75 seats in the front section. First-grade students coming to see the show will take 30 of those seats. Second-grade students need 25 of those seats. Is there enough room in the front section for all of the 21 students in third grade? **Show your thinking.**

Which ***MATH PRACTICES*** did you use to solve this problem? Circle all that apply.

I can make a plan and use my plan to solve the problem without giving up.



I can use numbers and words to help me make sense of problems.

I can explain my thinking and try to understand others.

I can recognize math in everyday life and use math I know to solve problems.

I can use math tools and tell why I chose them!

I can work carefully and be clear when I share my ideas. I can check my work.

I can see and understand how numbers and shapes are put together as parts and wholes.

I can create shortcuts and generalizations and reflect on the reasonableness of my answers.

There were 14 brownies on two plates. Maya took 2 brownies off the first plate. Then there were only 4 brownies on that plate. How many brownies were on the second plate? **Show your work with a picture**.

Grade 2 Only:
Next, Maya took half of the brownies off of the second plate. How many brownies were left on the TWO plates? **Draw a picture to show your work.**

Which ***MATH PRACTICES*** did you use to solve this problem? Circle all that apply.


I can make a plan and use my plan to solve the problem without giving up.

I can use numbers and words to help me make sense of problems.


I can explain my thinking and try to understand others.


I can recognize math in everyday life and use math I know to solve problems.


I can use math tools and tell why I chose them!


I can work carefully and be clear when I share my ideas. I can check my work.


I can see and understand how numbers and shapes are put together as parts and wholes.


I can create shortcuts and generalizations and reflect on the reasonableness of my answers.

Name:_____ Teacher:_____ Grade:_____

GRADES 3-4 January MATH CHALLENGE

Your challenge is to use your problem solving skills to solve these two problems. There are MANY ways to work on these. ***Be sure to show your thinking using pictures, number, and/or words.*** ***Due: January 26, 2017***

Alex, Brad, Calvin, and Dennis are playing checkers. Each of the 4 boys played 2 games with every other player. How many games of checkers were played altogether? **Show your work.**

Which ***MATH PRACTICES*** did you use to solve this problem? Circle all that apply.

I can make a plan and use my plan to solve the problem without giving up.

I can use numbers and words to help me make sense of problems.

I can explain my thinking and try to understand others.

I can recognize math in everyday life and use math I know to solve problems.

I can use math tools and tell why I chose them!

I can work carefully and be clear when I share my ideas. I can check my work.

I can see and understand how numbers and shapes are put together as parts and wholes.

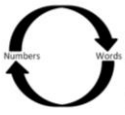
I can create shortcuts and generalizations and reflect on the reasonableness of my answers.

Marvin works in the summer for his dad's lawn service, 5 days a week for 4 weeks. His dad offers to pay him $125 a week. Instead, Marvin offers to work for $0.01 the first day, $0.02 the second day, $0.04 the third day, $0.08 the fourth day, and so on. Should Marvin's dad accept his offer? **Explain with numbers or words.**

Fourth Grade Only: Marvin's dad agreed to Marvin's doubling method. He said he would only pay him up to a total of $125. How many days will Marvin's day pay him for. (Don't forget about the money that Marvin made in the first day. For example, after the third day, Marvin will have made: $0.01, $0.02, and $0.04, totaling 7¢ by the end of day 3.)
Show your thinking. A table could help you keep track of the day and payment, and the total amount paid.

Which ***MATH PRACTICES*** did you use to solve this problem? Circle all that apply.


I can make a plan and use my plan to solve the problem without giving up.



I can use numbers and words to help me make sense of problems.


I can explain my thinking and try to understand others.


I can recognize math in everyday life and use math I know to solve problems.


I can use math tools and tell why I chose them!


I can work carefully and be clear when I share my ideas. I can check my work.


I can see and understand how numbers and shapes are put together as parts and wholes.


I can create shortcuts and generalizations and reflect on the reasonableness of my answers.