

Name: _____ Teacher: _____ Grade: _____

Grades 1-2 December 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: December 20 2016*

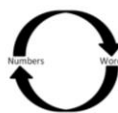
Mr. Smith's class is standing in a line. They are getting ready to walk to the playground when Mr. Smith begins moving students' position in the line.

- Kathy was 3rd in line. She moved back 5 spots. In what position is she now? Explain.
- Kelly was the 16th person in line. She moves up 7 spots, then back 1 spot. In what position is Kelly in now?

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.



Mr. Smith has 18 students in his class. For homework they are required to read a book for 10 minutes each night, Monday through Friday. How many total minutes would **each** student have read at the end of the week?

Second grade only: How many total minutes would **each** student have read in 1 month (if there are exactly 4 weeks)? How many minutes would the **entire class** have read at the end of each week?

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 December 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: December 20, 2016*

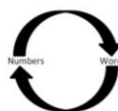
As they build towers with blocks, Sammy and Kendall use the following pattern to put a fence around one tower: cube, cube, cylinder, cube, cube, cylinder. What shape with the 8th block be? The 12th? The 19th? The 25th? Use the pattern to predict the 50th block.

Grade 4 ONLY: When Sammy reaches the 100th block, how many cylinders will be in the fence?

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



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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.



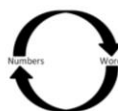
Can you solve these problems using an **open number line**?

- At school, Claire goes outside to play on the playground at 10:40 a.m. She plays for 1 hour and 10 min. What time does Claire go back inside?
- Claire gets out of school at 3:10 p.m. She must be in bed by 9:00 p.m. How much time does Claire have after school before she must go to bed?
- After school, Claire reads a book at 3:30. She reads for 45 min. What time did she finish reading her book?

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



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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.



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