



First Name: _____
Last Name: _____
Grade: _____
Teacher: _____

This is a Math Challenge without numbers. Try to solve as many problems as you can. Get your parents and siblings to help! Your solutions to this challenge are due on **Thursday, December 1 (no later than 3 p.m.)**. There will be six hand-held travel game prizes. Winners are randomly selected from qualified submissions and will be announced on Monday, December 5, 2011.

Kindergarten, First & Second Grade: Solve at least 5 problems.

Third & Fourth Grade: Solve at least 8 problems.

Fifth & Sixth Grade: Solve at least 10 problems.



1. Anna, Mary and Tom are in the movie theater. If Tom wants to sit by both girls what should be the order of their seating?
Answer: _____
2. A word contains the letters T, M, H and A. If M and H are first and last respectively* and A touches M and T what is the word I am thinking of? **Respectively* means in the order given.
Answer: _____
3. The evergreen tree is not taller than the maple tree. The oak tree is taller than the maple tree. Which tree is the shortest?
Answer: _____
4. Peter did not read fewer books than Anna. Lauren read more books than Anna and fewer than Peter. Who read the most books?
Answer: _____
5. The blue jump rope is shorter than the golden jump rope but longer than the yellow jump rope. Which jump rope is longer, the yellow jump rope or the golden jump rope?
Answer: _____
6. There are fewer raspberry cookies than chocolate cookies but there are more sugar cookies than raspberry cookies on the plate. What flavor cookies are there most of?
Answer: _____
7. Tom did not spend less money than Sam. Sam spent more money than Harry. Who spent the least money?
Answer: _____

8. I have a five-scoop ice cream cone. Each scoop is a different flavor. The five flavors are blueberry, chocolate, strawberry, vanilla and bubblegum. Here are some clues which can help you to figure out the order of the flavors from top to bottom:

- The vanilla scoop touches both the chocolate and blueberry scoop
- Vanilla is below the chocolate scoop but above the bubblegum scoop
- Strawberry is not on the top
- Bubblegum is not on the bottom



What flavors are from top to bottom?



9. A train has four cars, each a different color: red, green, white and yellow. The green car is neither the first nor the last. The yellow car is neither next to the white car nor next to the red car. The first car is white. What is the order of the cars in this train?

Answer: _____

10. Paul, Darius, Micah and Jeff met at the concert in Chicago but they came from the different cities: Pittsburg, Dallas, New York and Seattle. We know that:

- Paul and the boy from Seattle have never been in Pittsburg or New York.
- Micah is not from Seattle and he came to Chicago later than the boy from Pittsburg.
- Jeff liked the concert more than the boy from Pittsburg.

What city is Jeff from?

Answer: _____

11. Alex said that Thomas was lying. Thomas said that Mark was lying. Mark said that Thomas was lying. Tony said that Alex was lying. How many of the boys were lying? Answer: _____

12. Four friends, Masha, Dasha, Sasha and Pasha, were sitting on a bench. First Masha changed places with Dasha. Then Dasha changed places with Pasha. At the end, the girls sat on the bench in the following order from left to right: Masha, Sasha, Dasha, Pasha. In what order were they sitting in the beginning from left to right? Hint: start working backward.

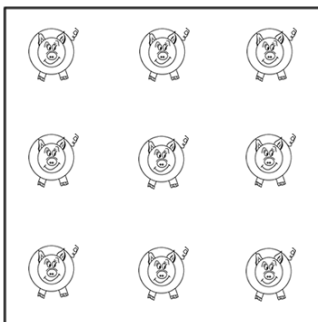
Answer: _____

Extension:

1. There are 6 pails, 3 of the pails are filled with water. Can you move only one pail and make a pattern of: full pail, empty pail, full pail, empty pail, full pail, empty pail.



2. Draw 2 squares to provide each pig with his own pen.



Math Challenge 6 will be available on December 9 at www.mathinaction.org and in our school's newsletter on December 12.

