

These are the ten types of problems that will be asked at the 1st Grade Math Challenge. There is an example included for each.

1. Process of Elimination

For breakfast I can eat pancakes, waffles or cereal. I can drink orange juice, milk or apple juice. What are all of the possible breakfasts I can have with one food and one drink? (One point if the team identifies 6-8 combinations, bonus point if the identify all 9 possibilities)

2. Algebra (1/2 point for each problem-no explanation needed)

$$8 + \square = 15$$

$$5 = \square - 6$$

$$8 + 2 = \square + 4$$

$$4 + \square = 15 - 6$$

3. Progressive Computation

I read 2 books on Monday. I read one more book than the day before for the next five days. How many books did I read on Saturday. Bonus point – how many books altogether?

4. Fractions

There will be a circle or square divided into thirds or fourths. One part will be shaded. Students must identify the fraction that is shaded. Bonus point – identify the fraction that is not shaded.

5. Part-Part-Whole

Students will use a Part-Part-Whole box to organize information from a story problem. The problem may have a missing part or may be missing the whole. Example – There are 30 students in the Math Challenge. If 17 of them are boys, how many are girls? One point for the correct answer. Bonus point for explanation of how they obtained the answer.

6. Comparing Quantities

Students will have to figure out quantities using half and double amounts. They will have to apply this information for an abstract story question.

Example- A first grade student has 10 pencils. He has twice as many crayons and half as many scissors. How much of each item does he have? One point for correct amounts. Bonus point – How many of those things can he write with?

7. Multiplication Through Repeated Addition

I planted 6 seeds in each of 3 rows. How many seeds did I plant? One point for correct answer. Bonus point for explanation (drew a picture, used doubles facts etc.)

8. Fact Families

List the Fact Family problems and answers you can make using the numbers 3, 6, 9.

One half point for each correct problem and answer. (2 total points)

9. Math in Sports (this year we will stick to basketball only)

In basketball you get 2 points for each basket that you make. You get one point for each free throw you make. The red team scored 6 baskets and 6 free throws. The blue team scored 3 baskets and 8 free throws. What was the final score of the game? Bonus Point for explanation of how they obtained the answer.

10. Multi-Step Computation

Forty parents came to the Open House. Thirteen had to leave early but 8 of them were able to come back. How many parents are at the Open House now? Bonus Point for explanation of how they solved the problem.