CGI Math
Teacher Learning Center

Here are some of the problems I have used with my third graders over the past 2 or 3 years. I tweak the problems every year to meet the needs of my students. I almost always change the names in the problems to match names of children in my class. I also adjust the numbers to provide more or less of a challenge to accommodate the particular students I have that year.

I find it useful to alternate between math content when choosing problems for my students. Even though these problems are presented by content, I don't pose all of the base ten problems before the multiplication and division problems and so on.

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Base Ten Problems

Shelby has ___ bags of books with 10 books in each bag. She also has 6 books that aren't in bags. How many books does Shelby have altogether?
> Beginning of the year numbers (8, 15) Middle of the year numbers (12, 30) End of the year numbers (20, 45)

If Mrs. Sawyer wants to buy ___ spirit strips and they cost 10 cents each. How much money would she need? (100) (400) (140) (480)

Our class collected ___ box tops. We had to put them into bags of tens. How many bags did we turn in? (398) (851) (1,645)

If 10 people want to share 3 cakes so that each person gets the same amount of cake. How much cake should each person get?

How many tens are in 4,519?
How many hundreds are in 4,519?

Multiplication and Division Problems

Erica is having a picnic with friends. She has invited ___ friends. If ___ friends can fit on one blanket, how many blankets does she need so that all her friends can sit on a blanket? (54, 6) (49, 7)

Tayla has ____ brownies. It takes ___ brownies to fill a plate. How many plates can she fill with brownies? (144, 12)   (108, 9)

Lauren has ___ bags of cookies. There are ___ in each bag. How many cookies does Lauren have? (4, 12) (7, 23) (9, 134)

Lily brought ___ packs of activity books. Each pack has ___ books. She will put the same number of books in ___ gift bags for her friends. How many books will be in each gift bag? (4, 6, 8)

One batch of cookies require 3 oz. of cream cheese. Lannie wants to make four batches for the harvest festival. How many ounces of cream cheese will she need? How many boxes of cream cheese will she need to buy if it comes in 8 oz. boxes?

Lola is going to make ____ pumpkin pies for school. She can only make 3 pies from a pumpkin. How many pumpkins will she need for her pies? (20) (36) (61)

At Caraway Commons, ___ apartment buildings were built. If there are 12 units in each apartment building, how many units are available? (15) (9) (21)

Cody has ___ pennies. If a bouncy ball cost ___ cents, how many bouncy balls can Cody buy?   (32, 4) (25, 5)

The school bus has _____ seats. Two students can sit on each seat. If all the seats on the bus are full, how many students are riding the bus? (14) (27)

There are _____ marbles and ____ bags. How many marbles will go in each bag if there are the same number of marbles in each bag? (72, 9) (141, 11) (228, 8)

The coach ordered ____ baseballs. The factory packs 12 baseballs in a box. How many boxes of baseballs will the team receive? (84) (156)

Mauro needs rubber bands for the newspapers. He delivers 17 newspapers each day. A box of rubber bands lasts him 20 days. How many rubber bands are in the box?

Kaleb has ____ spiders. How many legs is that? (51) (81)

Mrs. Green's class has to bake cookies for the cake walk at the fall festival. If all of her students make a dozen cookies, how many cookies would they have to sell?

Summer is getting new tile in her kitchen. The tile layers lay ___ rows of tile with ___ tiles in each row. How many tiles did they use to cover the floor?   (7, 6)

Mr. Brown has ____ plums. He gave them all away to ____ boys who asked for them. How many plums did each child get? (18, 3)

Amanda has ____ cokes. She has ____ boxes to put her cokes in. If she puts the same number of cokes in each box, how many cokes will there be in each box? (8, 4)   (56, 7)

____ students are going on a field trip to the fair. It cost 3 dollars for each student to get into the fair. How much would it cost for all ____ students to get into the fair?   (24) (25) (30) (67)

The third-grade class is responsible for setting up the chairs for the spring concert. The class needs to set up ____ rows of chairs with ____ chairs in each row, leaving space for a center aisle. How many chairs does the school's janitor need to retrieve from the storage area? (9, 8) (7, 20) (12, 25)

True and False Equations: Multiplication and Division

When posing these problems, I ask students, "is this equation true or false?" After they answer, I ask them why it is true (or false).

24 = 6 + 6 + 6

7 + 7 + 7 + 7 = 4 x 7

42 x 1 = 7 x 6

(3 x 18) + 9 = 9 x 4

Addition and Subtraction Problems

After students solve problems, a teacher move could be asking students to round to the closest ten, hundred, or thousand, if students are ready for that extension.

There were _____ balloons outside in our hallway. Then ___ balloons fell to the ground. How many balloons are still up? (200, 175) (235, 70)

Wren has ___ pumpkin seeds. She has ___ more seeds than Jacob. How many pumpkin seeds does Jacob have? (112, 39) (317, 93)

Sarah found ___ turtles on the beach this year. Last year she found ___ turtles. How many more turtles did she find last year?   (175, 200) (113, 273)

Andy has <u>300</u> books. If he donates ___ books to the library, how many books will he have left? (82) (282) (147)

Gunner purchased ___ Starbursts, and then bought ___ Tropical Starburst. When he got home, he realized he had ___ Starbursts at home. How many Starbursts does he have now? (19 ,145, 77)   (40, 66, 229) (500, 48, 31)

Bryce has ___ markers. He then finds another box of ___ markers. How many markers does he have now? Round your answer to the nearest hundred. (327, 241) (265, 387) (243, 179)

In Wisconsin the high temperature today was ___F. Our high in Jonesboro, Arkansas was ___F. What is the difference between the two temperatures? (-13, 23) (-22 , 9) (-22, 23)

True and False Equations -- Addition and Subtraction

When posing these problems, I ask students, "Is this equation true or false?" After they answer, I ask, "Why is it true (or false)?"

67 - 38 = 39 + 28

169 - 143 = 300 - 150

100 - 99 = 1,000 - 999

7 + 8 + 24 = 25 + 10 + 6

Fraction Problems

Sarah made 5 sandwiches for lunch. If 4 people share those 5 sandwiches so that each person gets the same amount of sandwich, how much sandwich would each person get?

Mariah and her 7 friends are going to share brownies today. If she brings 18 brownies, and they all eat the same amount. How much will one of them eat?

4 children have 6 candy bars. If they share the candy bars so that each child gets the same amount, how much candy bar would each child get?

There are 12 pizzas for 8 hungry teenagers to share. If they share the pizzas equally, how much pizza would each teenager get?

6 people are sharing 15 bars of clay so that each person get the same amount of clay. How many bars of clay would each person get?

There are 4 people sitting at the red table sharing 3 bottles of juice. There are 8 people at the blue table sharing 6 bottles of juice. Who would get more juice, a person sitting at the red table or the blue table?

Fraction Equations
When posing these problems, I ask students, "What does n have to be to make this a true equation?"

¾ = ¼ + ¼ + n

⅓ + ⅓ + ⅓ + ⅓ + ⅓ = j

¾ + ¾ = n

1 ÷ 2 = n

Time

For Thanksgiving my ham came out of the oven at noon. If it cooked for two and half hours. What time did my ham go into the oven?

I need 15 minutes to get dressed, 5 minutes to brush teeth, 10 minutes to eat breakfast, 17 minutes to drive to school. What time do I set my alarm clock to be at school by 7:30?

It is 1:15 p.m. If the movie takes 220 minutes. What time will the movie end?