***Teach Like Your Hair’s On Fire* by Rafe Esquith Problems**

**Citation:** Esquith, R. (2007). *Teach like your hair's on fire: The methods and madness inside room 56*. Penguin.

**The Game of Buzz**

Choose a “taboo digit” from 1 to 9. Then count consecutively 1, 2, 3, 4, …, replacing the digit you’ve chosen with the word *buzz*. Everyone participates in this fun activity.

For instance, if the taboo number is 6, the class would count:

1, 2, 3, 4, 5, buzz, 7, 8, 9, 10 , 11, buzz (12 is a multiple of 6),  
13, 14, buzz (since 1 + 5 = 6), buzz (since 16 has a 6) 17, buzz, 19, 21, 22,   
buzz (since 2 x 3 = 6), buzz (since 24 is a multiple of 6), and so on.

Any digit can be selected, prime or composite or perfect squares can be selected, etc.

**Mental Math Activities**

*1. Start with the number of states in the United States of America. (50)*

*Add a dozen. (Now they are adding 12 to get 62.)*

*Then subtract the number of Supreme Court justices. (Subtract 9 to get 53.)*

*Add the number of weeks in a fortnight which is how long the Wimbledon tournament lasts. (Add 2 to get 55).*

*Divide by 11 and show me your answer. (Everyone gets 5.)*

*2. Start with the number of pints in a gallon. (8)*

*Add the number of innings in a typical MLB game. (Add 9; the result is 17.)*

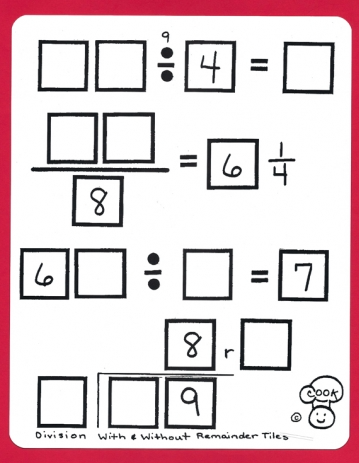
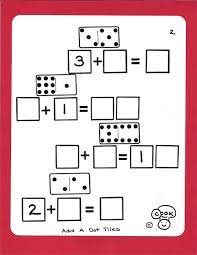
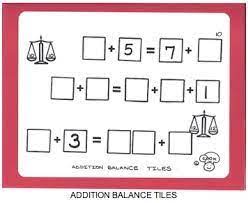
*Multiply by the number of millimeters in a centimeter. (Multiply by 10; the result is 170.)*

*Subtract the number of U.S. senators. (Subtract 100; the result is 70.)*

*Subtract a half-dozen. (Subtract 6; the result is 64.)*

*Show me the square root of this number. (Everyone gets 8.)*

**Marcy Cook Tile Problems (http://marcycookmath.com/)**

Use the numbers 0-9, each digit only once to complete these problem sets.