SAME NAME rule.

Edric Cane. **CommonSenseMath.org**

Have students choose (or suggest) a simple addition fact. 5 + 2 = 7.

Have them give examples of that fact as applied to real things.

Ask for full answers and write them down:

5 books + 2 books is 7 books.

5 dollars + 2 dollars = 7 dollars.

5 cats + 2 cats is 7 cats.

Ask what math facts these answers illustrate. 5 + 2 = 7.

These answers also are examples of a rule: Listen:

"Books ,,, books ,,, books."

"Dollars ... dollars ... dollars."

"Cats ... cats ... cats."

This is the typical rhythm of additions and subtractions.

Learn to hear it and to expect it.

"We can only add (and subtract) numbers that have the SAME NAME."

It's a fundamental rule of arithmetic with constant applications.

It also makes sense:

5 + 2 = 7. But if we try to add 5 dogs + 2 cats, we don't have 7 dogs. We don't have 7 cats. But those cats and dogs are pets. We can decide to call them pets, and now we can add: we have 7 pets.

Let's apply the SAME NAME rule to PLACE VALUE.

"What's 1 thousand + 2 thousand?"

"What's 1 hundred + 2 hundred?"

"What's 1 thousand + 2 hundred?"

1 + 2 = 3. But we don't get 3 of anything when we try to add 1,000 + 200."

We can only say: "1 thousand 2 hundred."

Or we can change 1 thousand into 10 hundred. Now we can add:

"10 hundred + 2 hundred = 12 hundred."

Now, the two numbers have the same name and we can add.

The "SAME NAME" rule is a powerful rule of arithmetic.

Math formulates it as a rule when it asks us to add mathematical objects:

With fractions: "Add the numerators and keep the COMMON DENOMINATOR."

"COMMON DENOMINATOR" is another way of saying "SAME NAME."

Check TOPICS "Fractions 1" to connect adding fractions with the rule that applies to anything we add.

In algebra: "You can only add LIKE TERMS." "LIKE TERMS" is another way of saying "SAME NAME."

Check "SAME NAME 2" for other details on the rule. Also "PLACE VALUE."