

Dear Parents,

As you probably noticed, your son or daughter has used a variety of methods for solving multi-digit multiplication problems other than the algorithm. We wanted to give you some information about how we have started instruction for multiplication and will continue teaching it for a week or so. Our Indiana Standard states:

4.C.2: Multiply a whole number of up to four digits by a one-digit whole number and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Describe the strategy and explain the reasoning.

This does not include using the algorithm for multiplication, so we will be using other strategies. Indiana Standards now place the algorithm in 5th grade. We have worked with the students to find out what strategies they were already using. These strategies are what they gave us.

Example problem 19×5

1. Skip counting 5,10,15, 20, ...
2. Circles- drawing 5 circles and putting tally marks or numbers inside to show groups..
3. Partial products 10×5 and 9×5
4. Repeated addition $19 + 19 + 19 + 19 + 19$

As we move into bigger numbers, the students changed or needed to add onto strategies. *(I have included examples of each written on the back.)*

- 1.. Area Model- Breaking apart the numbers into thousands, hundreds, tens, ones and drawing a sketch of a rectangle. Students find the area of each smaller rectangle and add them together.
2. Partial products- breaking apart larger numbers into smaller, easier numbers to work with in a problem.
3. Products below- this is the start of the algorithm, but does not “carry” any numbers. Whole products are written below the line to add together.

We understand this is very different from the way we learned in school, but this should lead to a better understanding of the algorithm and multiplication in the long run. We have also placed videos made by our math coach on our websites. To access these, go to www.mcsin-k12.org. Next choose HIS and staff listing 4th grade. Scroll down to click on our websites (icon that is www) to get to our team website. Then click on our picture to find weblinks. Let us know if you have any questions that we can answer.

Thanks for your help!

4th Grade Math Teachers