Name:_____ Date:_____

School Closed! School Closed! School Clos ...

The signboard repeats the phrase "School Closed!" over and over again. Notice that there are spaces between the words School and Closed and between ! and School.
- Will the 100th symbol be a letter, a space, or the exclamation point?
- What symbol will be in the 100th place?

- Explain how you figured out your answer and how you know your answer is correct.

Challenge: Which word will be the 1999th word to be printed?   Use the back of this paper to explain how your figured out this answer and how you know your answer is correct.

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School_Closed!_ = 15 letters and spaces that repeat over and over. 100/15 = 6 R10. This means that the sign repeats School_Closed!_ 6 times and then prints the first 10 letters/spaces of "School_Closed!_ " to make 100 symbols.
- **The 100th symbol will be a letter.**
- **The letter "o" in Closed will be in the 100th place because this is the 10th symbol in "School_Closed!_ ."**

- **I know the answer is correct because I had to figure out how many times School_Closed!_ would be printed using 100 symbols. First I figured out the School_Closed!_ is 15 letters/spaces, then I figured out how many times 15 goes into 100 and if there is a remainder. Since there was a remainder of 10, I know that the signboard printed the 10th symbol of "School_Closed!_ " for the 100th letter.**

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ANSWER:

The signboard repeats School Closed! over and over.
School will be the 1st, 3rd, 5th… word.
Closed will be the 2nd, 4th, 6th...word.

This means that every odd-numbered word will be School and every even-numbered word will be Closed.

Since 1999 is an odd number, the 1999th word to be printed on the signboard will be "Closed."