Math Moments!

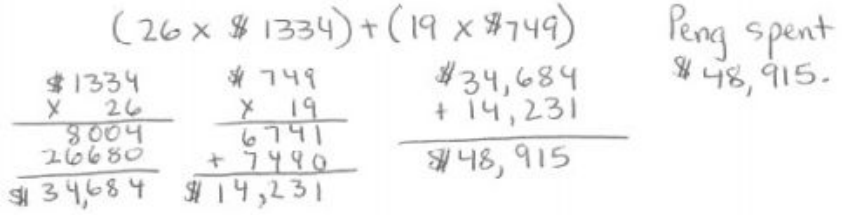
Math in a 5th grade Classroom!

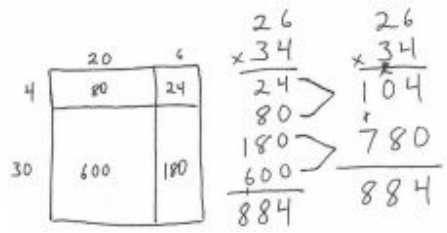
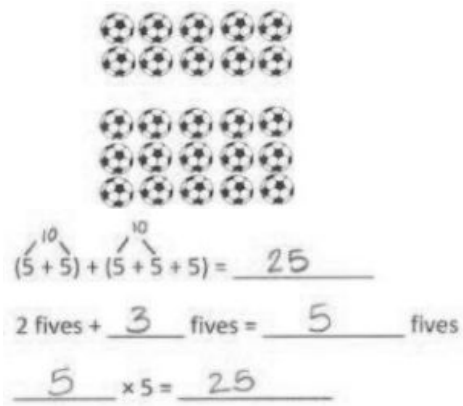
At this point in a 5th grade year, students are making connections between previously taught concepts to the standard algorithm for multiplication. Students are taking their understanding of place value, the distributive property, the area model, and partial products and applying these concepts to the multiplication algorithm which results in a deeper understanding of this procedural algorithm.

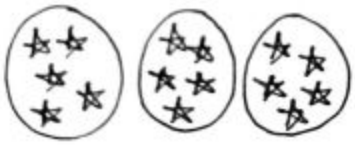
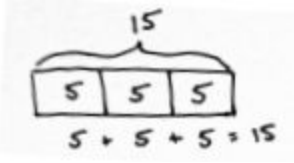
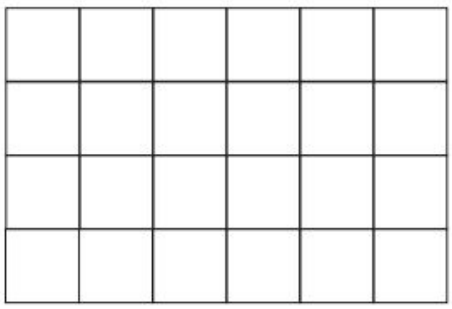
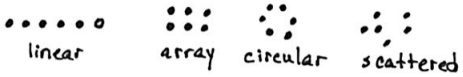
Math Concept: Multiplication

5th Grade →

Peng bought 26 treadmills for her new fitness center at $1,334 each. Then, she bought 19 stationary bikes for $749 each. How much did she spend on her new equipment? Write an expression, and then solve.



Grade	Overview	Sample Problem and Answer
4th Grade →	Students in fourth grade use place value understanding, partial products and visual representations such as the area model to solve multiplication problems with multi-digit numbers. As a key area of focus for Grade 4, students reason about the methods and models chosen to solve problems with multi-digit factors.	
3rd Grade →	Building on students' fluency with repeated addition and their knowledge of arrays, students start to notice patterns and let go of longer addition sentences in favor of more efficient multiplication facts. Arrays become a cornerstone and are used to model the distributive property. Students use the language of multiplication as they understand what factors are and differentiate between the size of groups and the number of groups within a given context.	

2nd Grade	Grade 2 lays the conceptual foundation for multiplication and division in Grade 3. Students begin by making equal groups using concrete materials and then progress to pictorial representations where they may begin by circling a group of 5 stars, adding 5 more, and then adding 5 more. They determine the total and relate their drawings to the corresponding repeated addition equation. Students calculate the repeated addition sums by adding on to the previous addends, step-by-step, or by grouping the addends into pairs and adding. Tape diagrams are used to represent the total and to show the number in each group.	 
1st Grade	Besides their work with partitioning shapes into equal parts which lays the foundation for applying this understanding to the use of equal groups in third grade, students also have the opportunity to strengthen their fluency of the double facts such as 2 + 2, 3 + 3, 4 + 4, 5 + 5, etc… and skip count, which have a direct impact on multiplication.	How many squares do you see in this rectangle? 
Kindergarten	Students order, count and write up to 10 objects to answer " *how many"* questions from linear, to array, to circular, and finally to scattered configurations. Students use their understanding of numbers and matching numbers with objects to answer "*how many*" questions about a variety of objects, pictures, and drawings. Foundational under-standing of area is also presented to students informally to explore area. They see whether a yellow circle fits inside a red square. They then see how many small blue squares will fit inside the red square and, finally, many beans can cover the same area. Notice the two arrays in these examples to the right?	 

Resource:
www.greatminds.org