



Curriculum Units by Fellows of the National Initiative
2018 Volume IV: Big Numbers, Small Numbers

Place Value Meets Multiplication: Utilizing Place Value to Comprehend Multiplication

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This eight-day, 70- minute, block-scheduled curriculum unit directs students through the use of place value as a guide for understanding conceptual multiplication. The purpose of the unit is to connect the Base-Ten number system and place value with three different, yet closely -related multiplication strategies: area model, box method, and the standard U.S. algorithm. The unit also incorporates carefully selected operational properties for both addition and multiplication since they assist in explaining the many whys associated with performing various types of multiplication algorithms. The lessons are designed for whole group instruction, collaborative teamwork via small groups or peer pairs, and student-led discussions and demonstrations leading to individual, inquiry-based exploration. At the conclusion of the unit, the students will have an increased understanding of the ways place value and multiplication are connected and will have a minimum of three strategies at their disposal to solve and check multiplication problems of all sorts of complexities in the elementary years and those beyond.

(Developed for Mathematics, grade 4; recommended for Mathematics grades 3 and 5)

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