Topic F

Partial Quotients and Multi-Digit Whole Number Division

**5.NBT.6**

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| Focus Standard: | 5.NBT.6 | Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. |
| Instructional Days: | 5 |  |
| Coherence -Links from: | G4–M3 | Multi-Digit Multiplication and Division |
| -Links to: | G6–M2 | Arithmetic Operations Including Division of Fractions |

The series of lessons in Topic F leads students to divide multi-digit dividends by two-digit divisors using the written vertical method. Each lesson moves to a new level of difficulty with a sequence beginning with divisors that are multiples of 10 to non-multiples of 10. Two instructional days are devoted to single-digit quotients with and without remainders before progressing to two- and three-digit quotients (**5.NBT.6**).

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| A Teaching Sequence Towards Mastery of Partial Quotients and Multi-Digit Whole Number Division |
| Objective 1: Divide two- and three-digit dividends by multiples of 10 with single-digit quotients and make connections to a written method. (Lesson 19) |
| Objective 2: Divide two- and three-digit dividends by two-digit divisors with single-digit quotients and make connections to a written method. (Lessons 20–21) |
| Objective 3: Divide three- and four-digit dividends by two-digit divisors resulting in two- and three-digit quotients, reasoning about the decomposition of successive remainders in each place value. (Lessons 22–23) |