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| Use place value understanding to round multi-digit whole numbers to any place. |
| 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. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. |
| * Knowledge of the use of arrays area models for multiplication
 |
| * Knowledge of and ability to apply the Properties of Operations
 |
| Find whole-number quotients and remainders with up to four-digit dividends and one-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. |
| * Ability to apply knowledge of multiplication and division within 100
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| * Ability to use Arrays and area models for multiplication and division
 |
| * Knowledge of and ability to apply the Properties of Operations
 |
| Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole number exponents to denote powers of 10.  |
| * Knowledge of exponents with powers of 10.
 |
| Read, write, and compare decimals to thousandths.  |
| * Read and write decimals to thousandths using base-ten numerals, number names, and

 expanded form, e.g., 347.392 = 3 • 100 + 4 • 10 + 7 • 1 + 3 • (110) + 9 • (1100) + 2  (11000).  |
| * Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.
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| Use place value understanding to round decimals to any place.  |
| * See the skills and knowledge that are stated in the Standard.
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| 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.  |
| * See the skills and knowledge that are stated in the Standard.
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| Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.  |
| * Ability to recognize that the product is not always larger than its factors
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| * Ability to recognize that the quotient is not always smaller than the dividend
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| Write and evaluate numerical expressions involving whole-number exponents. Essential Skills and Knowledge  |
| * Ability to develop understanding of a whole-number exponent as shorthand for repeated multiplication of a number times itself
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| * Ability to introduce squares and cubes first because they can be represented geometrically
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| * Ability to extend understanding of order of operations to include exponents
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