

Course Description:

Mathematics 5th Grade (1 of 2) addresses concepts related to place value, operations with multi-digit whole numbers, and operations with decimals. The instruction covers identifying and using place value for calculations and rounding decimals; multiplying and dividing multi-digit whole numbers by two-digit numbers; adding, subtracting, multiplying, and dividing decimals; and applying mathematical processes and understanding to solve word problems.

Course Objectives:

- Explain that each digit's value is 10 times the value of the digit to its right and one-tenth of the value of the digit to its left, even with decimals to the thousandths.
- Explain patterns in the placement of the decimal point and the number of zeros when working with powers of 10.
- Write whole-number exponents to show powers of 10.
- Compare how efficient different methods of doing math are.
- Use models and methods to solve problems.
- Read and write decimals to the thousandths in standard form, word form, expanded notation, and expanded form.
- Compose and decompose multi-digit numbers with decimals to the thousandths in multiple ways using the values of the digits in each place.
- Order, plot and compare two decimals to thousandths.
- Round numbers with decimals to the thousands to the nearest hundredth, tenth, or whole number.
- Estimate to find answers to real-world and math problems with addition, subtraction, multiplication, and division.
- Check calculations when solving problems.
- Find the whole-number answer when dividing whole numbers with up to five digits by two-digit divisors.
- Go from modeling problems with objects and drawings to using algorithms and equations.
- Use objects and models to show decimals being multiplied and divided, with answers going to the hundredths.
- Use different ways to multiply decimals.
- Explain the thinking used when comparing strategies to written methods.
- Use math to solve problems in everyday life.
- Use different ways to divide decimals.
- Add or subtract decimals to hundredths or thousandths using different strategies.

Required Materials:

Required:

- crayons or colored pencils
- paper
- pencils
- printables (see Course Syllabus for link)
- printer and printer paper (for printables)

Course Overview:

This course is made up of 12 units. Each unit has five lessons. Lessons are made of up activities that include the following types of learning:

- **Warm-Ups** allow for practice of skills or concepts taught in previous lessons. These are graded activities.
- **Direct Instructions** provide modeling of new skills and concepts. These are not graded activities.
- **Guided Practices** allow for practice of a skill with support. These are graded activities only on a completion basis.
- **Independent Practices** allow for practice of a skill without support. These are graded activities.
- **Checkpoints** test mastery of skills from lessons. These are graded activities.
- **Unit Reviews** allow for practice of skills prior to taking unit exams. These are not graded activities.
- **Unit Exams** test mastery of skills from the unit. These are graded activities.