Course Description:

Mathematics Grade 3 (1 of 2) explores number sense; place values; operations such as addition, subtraction, and multiplication; measurement; and representing data. The topics include exploring numbers up to 100,000; using place value to plot, compare, and order numbers; rounding to the nearest tens and hundreds; using different strategies to add and subtract numbers up to 1,000; multiplication; finding area and perimeter; finding volume in liters and mass in grams and kilograms; using measurement and other data to create scaled pictures and bar graphs; and using scaled pictures and bar graphs to gather information and compare data sets.

Course Objectives:

- Break apart and put together numbers using place value, models, expanded form, and standard form.
- Read and write numbers using standard form, expanded form, and word form.
- Identify what each digit in a number means and where it goes up to 100,000.
- Show numbers on a number line between two tens, hundreds, thousands, or ten thousand.
- Round numbers under 1,000 to the nearest ten or hundred.
- Compare numbers up to 100,000 using a number line, place value, or math sentences and put them in order.
- Identify if answers make sense using mental math, estimation, and rounding.
- Recognize, create, and expand patterns of numbers by adding, subtracting, multiplying, or dividing.
- Add and subtract numbers of hundreds using place value, rules, and the relationship between addition and subtraction.
- Find answers to one-step and two-step word problems using addition, subtraction, multiplication, or division.
- Show multiplication and division as groups with the same number of things using arrays, diagrams, number lines, counting, and equations.
- Identify and explain patterns between numbers using multiplication.
- Multiply and divide numbers using different ways including visual models, multiplication facts, the relationship between multiplication and division, and multiplication or division equations.
- Find missing numbers in multiplication or division problems using fact family equations.
- Identify if a math sentence is correct or not.
- Identify, group, and draw four-sided shapes and special types of four-sided shapes by their special features.
- Find the areas of rectangles using unit squares or a formula.
- Find answers to problems involving measurements, such as areas, liquid volumes, and object masses.
- Identify and estimate liquid volumes and object masses using appropriate units and tools.
- Find answers to problems using information shown in different displays, including tables, scaled bar graphs, and scaled picture graphs.
- Tell how much money you have by adding up all the coins and bills in a group.

Required Materials:

Required:
- 2 dice
- paper

- pencils
- printables (see Course Syllabus for link)
- printer and printer paper (for printables)
- whiteboard
- whiteboard eraser
- whiteboard markers

Optional:
- base ten blocks

Course Overview:

This course is made up of 18 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.