

## **Summer Courses: Basic 4<sup>th</sup> and 5<sup>th</sup> Math**

**(Recommended for but not limited to students entering the 4<sup>th</sup> and 5<sup>th</sup> grades)**

- Multiplication facts
- Division facts
- Properties of numbers
- Addition of whole numbers up to six digits
- Subtraction of whole numbers
- Subtracting across zeros
- Rounding numbers
- Estimation
- Adding and subtracting decimals and money
- Multiplication up to 3 digits x 3 digits
- Long division
- Fraction concepts
- Decimal concepts
- Number lines with fractions and decimals
- Equivalent fractions
- Simplify fractions
- Make mixed numbers
- Make improper fractions
- Compare and order fractions
- Add and Subtract like fractions

## **Summer Courses: 4<sup>th</sup> and 5<sup>th</sup> Advanced Math**

**(Recommended for but not limited to students entering the 4<sup>th</sup> and 5<sup>th</sup> grades)**

- Review of addition, subtraction, multiplication, division
- Properties of numbers
- Fraction Concepts
- Fractions and number lines
- Compare and order fractions
- Simplify fractions
- Make mixed numbers
- Make improper fractions
- Add and subtract like and unlike fractions
- Add and subtract mixed numbers
- Subtract mixed numbers with borrowing
- Multiply fractions and mixed numbers
- Divide fractions and mixed numbers
- Decimal concepts
- Decimals and number lines
- Add decimals
- Subtract decimals
- Multiply decimals
- Divide decimals
- Round decimals
- Convert fractions to decimals and decimals to fractions
- Compare and order decimals

## Summer Courses: Basic 6<sup>th</sup> and 7<sup>th</sup> Math

**(Recommended for but not limited to students entering the 6<sup>th</sup> and 7<sup>th</sup> grades)**

- Properties of numbers
- Multiplication (3 digit x 3 digit)
- Long division
- Review of fraction concepts
- Fractions and number lines
- Add and subtract unlike fractions and mixed numbers
- Subtract mixed numbers with borrowing
- Multiply fractions and mixed numbers
- Divide fractions and mixed numbers
- Add and subtract decimals
- Multiply decimals
- Divide decimals
- Convert fractions to decimals and decimals to fractions
- Percent
- Decimals and number lines
- Fraction, decimal, percent charts
- Evaluate expressions
- Solve 2 step equations
- Add, subtract, multiply, and divide integers
- Integers and number lines
- Absolute value
- Evaluate expressions with integers
- Exponents and prime factorization
- Solve equations with exponents
- Ratios
- Proportions
- Coordinate Grids
- Area and Perimeter
- Circles and circumference

## Summer Courses: Advanced 6<sup>th</sup> and 7<sup>th</sup> Math

**(Recommended for but not limited to students entering the 6<sup>th</sup> and 7<sup>th</sup> grades)**

- Add, subtract, multiply, and divide fraction and mixed numbers
- Add, subtract, multiply, and divide decimals
- Fraction-decimal-percent charts
- Evaluate expressions
- Solve 2 step equations which include exponents, fractions, mixed numbers, decimals, integers
- Add, subtract, multiply, divide integers
- Compare and order integers
- Ratios
- Proportions
- Using integers with mean, median, and mode
- Exponents with equations and integers
- Simplify algebraic equations
- Solve multi-step equations
- Solve inequalities (add, subtract, multiply, divide)
- Solve two step inequalities
- Scales, models, and maps
- Percent
- Percent and equation
- Percent of change
- Markup and discount
- Simple and compound interest
- Probability
- Coordinate grids
- Area and Perimeter
- Circles
- Coordinate grids