# Student Goals for Arithmetic Masters

## Module 1: Numbers & Operators

### Student can Identify:

- Integers, primes, composites, and real numbers
- Operations: addition, subtraction, multiplication, and division

### Student can Explain:

- The definitions of operations
- The number sets, prime numbers, and composite numbers

#### **Student can Calculate:**

- Expressions using the order of operations
- Short and long division problems

#### Module 2: Number Sense

# Student can Identify:

- Factors, multiples, and the identities
- Expressions and the properties of arithmetic

# Student can Explain:

- The similarities between two composite numbers by using their factors
- The properties we use to simplify expressions

#### **Student can Calculate:**

LCM and GCF

#### Module 3: Fractions

### Student can Identify:

• fractions, mixed numbers, and rates

## Student can Explain:

- How fractions need a common denominator for addition or subtraction
- How to convert from an improper fraction to a mixed number and back
- The relationship that exists between distance, rate, and time and how it manifests itself.

#### **Student can Calculate:**

- The results of adding, multiplying, and simplifying fractions
- Solve problems involving rates

### Module 4: Decimals

## Student can Identify:

- Decimals and the place values in the decimal system
- Percents as fractions, percents, and decimals

# Student can Explain:

- How to round decimals
- How the base-10 number system works

#### **Student can Calculate:**

- Basic percent values
- Add and multiply decimal values

# Module 5 : Geometry

## Student can Identify:

• Lines, rays, angles, circles, triangles, and quadrilaterals

## Student can Explain:

- The similarities between different quadrilaterals
- The differences between the perimeter and area of shapes and how to use them in basic problem solving

## **Student can Calculate:**

• The perimeter and area of circles, triangles, and quadrilaterals