

## **First Grade Mathematics**

The Everyday Math standards-based math program, researched and designed by the University of Chicago Mathematics Project, is used as the first grade math curriculum. The program spirals from grades one through five, allowing students to gain a richer connection with math process and procedure. Content strands include: Number and Numeration, Operations and Computation, Data and Chance, Measurement and Reference Frames, Geometry, and Patterns, Functions, and Algebra. The use of manipulatives, familiar to your child from the Montessori classroom, assists teachers in instruction from concrete processes to more difficult, abstract ones. The Academy advantage of smaller class size, with the support of the Learning Resource Department, allows teachers to differentiate, support, and augment the program for all learners.

### **Areas of Study**

#### **Number and Numeration**

- Rote counting
- Rational counting
- Place value and notation
- Meanings and uses of fractions
- Number theory
- Equivalent names for whole numbers
- Comparing and ordering numbers

#### **Operations and Computation**

- Addition and subtraction facts
- Addition and subtraction procedures
- Computational estimation
- Models for the operations

#### **Data and Chance**

- Data collection and representation
- Data analysis
- Qualitative probability

#### **Measurement and Reference Frames**

- Length, weight, and angles
- Money
- Temperature
- Time

#### **Geometry**

- Plane and solid figures
- Transformations and symmetry

#### **Patterns, Functions, and Algebra**

- Patterns and functions
- Algebraic notations and solving number sentences
- Properties of the arithmetic operations