



The goal of the University of Chicago Mathematics Project is to significantly improve the mathematics curriculum and instruction being offered to school students in the U.S. The *Everyday Mathematics* curriculum was developed as part of this mission.

▷ **Philosophy of *Everyday Mathematics***

The philosophy of the program is based on extensive research about how students learn mathematics and how mathematics is taught. Students need a rigorous and balanced mathematics curriculum. Such a curriculum:

- ◆ **emphasizes conceptual understanding while building a mastery of basic skills.** When students understand mathematics, rather than simply memorize facts or procedures, they are able to use their knowledge flexibly and solve new and unfamiliar problems.
- ◆ **explores the full mathematics spectrum, not just basic arithmetic.** Students are introduced to all major mathematical content areas—number sense, algebra, measurement, geometry, data analysis, and probability—beginning in Kindergarten.
- ◆ **considers how students learn, what they're interested in, and the future for which they must be prepared.** Consistent with the ways students actually learn mathematics, the program allows for understanding to be built over time. Students acquire knowledge and skills through active involvement in meaningful, real world experiences.

Everyday Mathematics was developed through a process of writing, field testing, and revising one grade level at a time. The result is a comprehensive Pre-K through Grade 6 curriculum that carefully builds upon and extends knowledge and skills from one year to the next.

▷ **Outstanding Features of the *Everyday Mathematics* Curriculum**

- ◆ **Real-life Problem Solving**
Students learn and use mathematics in real-world situations. Activities and lessons explore a wide variety of mathematical content, such as geometry, probability, and algebra, in contexts that are interesting to students and worthy of their time and attention.
- ◆ **Balanced Instruction**
Lessons include whole-group instruction, as well as small group, partner, or individual activities. There is a balance of teacher-directed instruction and open-ended, hands-on exploration, projects, and on-going practice.

◆ **Carefully Planned, Sequenced Instruction**

Instruction builds on the intuitive, concrete knowledge and abilities of young students and gradually helps them develop an understanding of the abstract and symbolic. There is repeated exposure to concepts and skills, which build on each other and are highly interconnected.

◆ **Ongoing, Continuous Basic Skills Practice**

Certain skills must be mastered in order to be a flexible problem solver. The program provides multiple methods for helping students practice basic skills and math facts, including games designed specifically for this purpose.

◆ **Emphasis on Communication**

Students are encouraged to discuss their mathematical thinking and actively listen to each other. Teachers guide student understanding through questions and clarifications and help students learn to make logical mathematical arguments.

◆ **Appropriate Use of Technology**

Students learn when and how to use technology responsibly. Technology can enable students to work at higher levels, it can help them test ideas, and it can benefit those students with special needs.

◆ **Home and School Partnership**

Optimal learning involves the student, the teacher, and the home. Frequent letters keep parents informed about topics and terms being learned, and Home Links/Study Links offer opportunities to help students with review and practice.

Everyday Mathematics is committed to helping students become capable and flexible mathematical thinkers and problem solvers, which will prepare them for success in our ever-changing world.