

Olathe District Schools Math Curriculum

The district math curriculum outlines math competencies students need to know and be able to demonstrate.

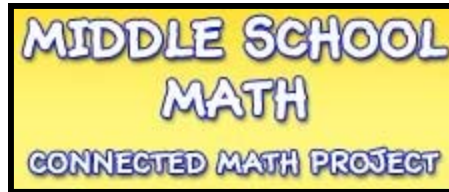
A variety of resources and teaching tools are used in our classrooms to teach the district curriculum from manipulatives to technology. A long-range teaching plan has been developed for each grade level along with a cyclic review. Connected Math 2 provides a solid math instructional foundation based on district, state, and national standards.

All students should be able to reason and communicate proficiently in mathematics. They should have knowledge of and skill in the use of the vocabulary, forms of representation, materials, tools, techniques, and intellectual methods of the discipline of mathematics, including the ability to define and solve problems with reason, insight, inventiveness and proficiency.

2005—Math Curriculum, adopted BOE Nov. 2005

2006—Connected Math Program resources selected

2008—Connected Math Program 2, adopted BOE Apr. 2008



With funding from the National Science Foundation (NSF) in 1991-1996, and in 2000-2006, the Connected Mathematics Project (CMP) developed a complete mathematics curriculum for middle school teachers and students. CMP helps students and teachers develop an understanding of important mathematical concepts, skills, procedures, and ways of thinking and reasoning in number sense, geometry, measurement, algebra, probability and statistics. CMP is based on research, and was field-tested in diverse sites across the country with approximately 45,000 students and 390 teachers. Each unit, in both 1991-1996 and 2000-2006 development periods, went through at least 3 cycles of field testing. A growing body of Research and Evaluation reports indicates that CMP outperforms non-CMP curricula on tests of problem-solving ability, equals or outperforms non-CMP curricula on skills tests, and promotes long term retention.

CMP2 at a glance:

- Is organized around important mathematical ideas
- Develops deep understanding of important ideas
- Embeds ideas in carefully selected and sequenced problems, to develop a coherent, connected curriculum
- Makes rich connections across problems, investigations from grade to grade
- Provides ongoing practice and assessment for important concepts, related skills, and algorithms
- Supports inquiry instruction and learning with an instructional model based on findings from recent cognitive research
- Supports teacher learning of both content and pedagogical strategies with extensive teacher guides

Meets the needs of all students to grow in their ability to reason effectively, using different representations.



Websites

Home site for CMP2:

www.PHSchool.com

CMP2 Website for Parents:

<http://connectedmath.msu.edu/parents.html>

See a CMP2 video:

<http://www.sdb.k12.wi.us/cmp/parents.html>



Modules

Grade 6

Prime Time—factors and multiples
Bits and Pieces I, II, III—fractions, decimals, %
Shapes and Designs—2-dimensional geometry
Covering and Surrounding—perimeter and area
How Likely Is It?—probability

Grade 7

Variables and Patterns—tables and graphs
Stretching and Shrinking—scale factors
Comparing and Scaling—ratio, proportion, percent
Accentuate the Negative—integers
Moving Straight Ahead—linear equations
Filling and Wrapping—volume and surface area
What Do You Expect?—probability

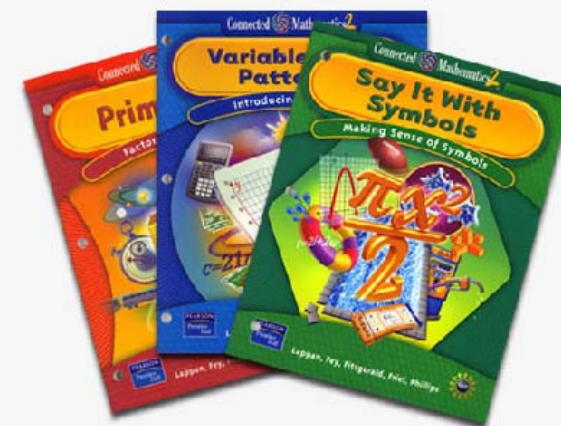
Grade 8

Thinking with Mathematical Models—functions
Looking for Pythagoras—Pythagorean Theorem
Growing, Growing, Growing—exponential functions
Frogs, Fleas, and Painted Cubes—quadratics
Say It With Symbols—expressions and equations
The Shapes of Algebra—linear systems/inequalities
Samples and Populations—data and statistics

Algebra Sooner



Connected Mathematics Program (CMP2) Grades 6-7-8



A three year program where all students have the opportunity to complete Algebra by 8th grade.