

# Math Summary

Students in sixth through eighth grades are engaged in meaningful mathematical experiences that support all strands of mathematics. The following strands, which align to the Michigan Curriculum Framework, standards and benchmarks, are part of this program.

1. Number and Operation
2. Measurement
3. Geometry
4. Data and Probability

The grade level overviews are a condensed version of the curriculum. This is not the entire curriculum, but a summary of student objectives and units that are taught. The Connected Mathematics program provides separate units for each grade. Every unit is organized around an important mathematical idea or cluster of related ideas.

The Connected Mathematics Project was funded by the National Science Foundation to develop a mathematics curriculum for middle school students. Connected Mathematics is a complete and comprehensive program for students. There are five guiding themes of the Connected Mathematics Program.

## **1. Mathematical Investigations:**

The curriculum is organized around “big ideas” in mathematics – clusters of important, related mathematical concepts, processes, ways of thinking, skills and problem solving strategies, which are studied in depth.

## **2. Reasoning:**

Students grow in their ability to reason effectively with information represented in pictorial, graphic, numeric, symbolic and verbal forms and move flexibly among these representations.

## **3. Connections:**

The curriculum emphasizes significant connections among various mathematical topics and problems in other school subjects that are meaningful to students. The curriculum also offers an opportunity to revisit and deepen understanding of ideas.

## **4. Teaching for Understanding:**

Instruction emphasizes inquiry and discovery of mathematical ideas through investigation of rich problem situations.

## **5. Technology:**

Selection of mathematical goals and teaching approaches reflects the information processing capabilities of calculators and computers and the fundamental changes these tools are making in the ways people learn mathematics and apply their knowledge to problem solving tasks.

**To find out more about Connected Mathematics, visit their website at:**

<http://www.math.msu.edu/cmp>