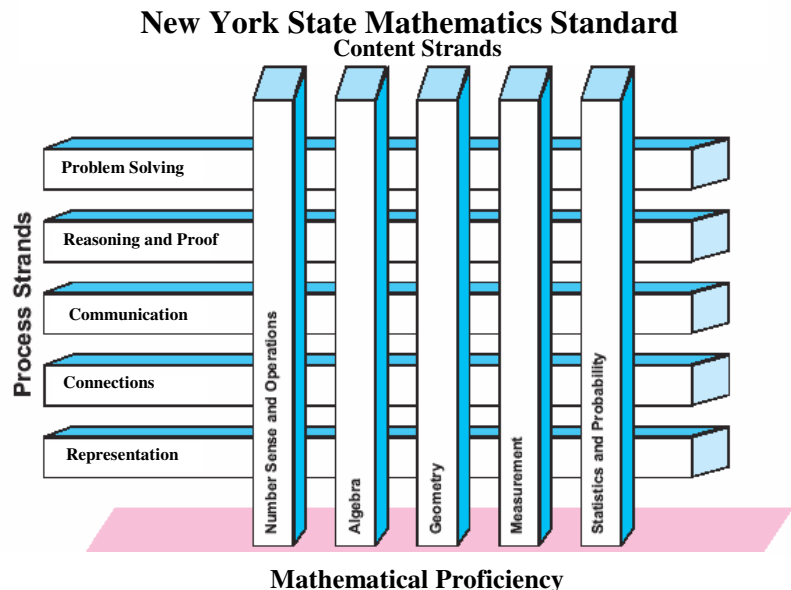


Curriculum Guide for Parents

Kindergarten Mathematics

The State of New York adopted a revised Mathematics curriculum in March of 2005. The format for the *Mathematics Curriculum Guide for Parents* below is based on their structure. The diagram from the NYS documentation demonstrates the relationship between the **Process Strands** and the **Content Strands**.



Process Strands

Problem Solving
Reasoning and Proof
Communication
Connections
Representation

The following performance indicators are included when helping students approach the **Process Strands**:

- explore, examine, and make observations about a social problem or mathematical situation
- interpret information correctly, identify the problem, and generate possible solutions
- formulate problems and solutions from everyday situations
- compare and discuss ideas for solving a problem with teacher and/or students to justify thinking (grade 1 and 2 only)
- explain situations verbally or by using objects
- use appropriate mathematical terms, vocabulary, and language
- use multiple representations, including: verbal and written language; acting out or modeling a situation; drawing and/or symbols as representations; to organize, record, and communicate mathematical ideas (grade 1 and 2 only)
- utilize literature and/or storytelling when problem solving

Problem solving strategies should be integrated into the curriculum throughout the year.

Content Strands

Number Sense and Operations

- Verbally count 1 - 20
- Verbally count backward from 10
- Write numbers 1 - 10
- Use and understand ordinal terms first - tenth
- Solve and create addition and subtraction verbal word problems
- Draw pictures to represent 1 - 10
- Identify more, less and same amounts from pictographs or concrete models

Algebra

- Recognize, describe, extend and create simple patterns (color, size and shapes)

Geometry

- Describe characteristics and relationships of geometric objects
- Sort objects by size and size order
- Understand and use ideas such as over, under, above, below, on, beside, next to and between

Measurement

- Name, discuss and compare attributes of length (longer, shorter)
- Relate specific times of day to activities (morning, noon, afternoon, night)

Statistics and Probability

- Gather data related to real life (birthday, favorite color)
- Make pictographs and quantities 1-10
- Sort and organize objects by two attributes (color, size, shapes)
- Identify more, less and same amounts