

Second Grade Math Curricula

The second grade Mathematics Curriculum focuses on five process strands: problem solving, reasoning and proof, mathematical communication, connections, and representations. Interweaved into these process strands are five content strands: number sense and operations, algebra, geometry, measurement, and statistics and probability. The entwining of these content strands and process strands will allow our children to become mathematically proficient in conceptual understanding, procedural fluency and problem solving. Our district's Mathematics Curriculum has been aligned with the revised New York State Standards for Mathematics. <http://www.emsc.nysed.gov>

CONTENT STRANDS

Number Sense and Operations

- Relate counting to group value and place value
- Understand whole numbers before, after, in-between
- Compare whole numbers, greater number, lesser number and learn the use of the symbols $>$ and $<$
- Compare and order numbers to 100
- Count by 1's, 2's, 3's, 5's and 10's
- Skip count from 100 by 1's, 2's, 5's and 10's
- Skip count by 3 to 36
- Skip count by 4 to 48
- Review basic addition and subtraction, including problem solving
- Add and subtract one and two digit numbers with and without regrouping
- Compose and decompose two digit numbers
- Communicative property of addition
- Justify odd and even
- Use ordinal terms
- Make reasonable estimates to 100

Algebra

- Use the symbols $<$, $>$, $=$ to compare whole numbers up to 100
- Describe and extend increasing/decreasing sequences and patterns of numbers and objects up to 100

Geometry

- Experiment with slides, flips and turns to compare two dimensional shapes
- Explore relationships among two dimensional shapes understanding similarities and differences
- Explore line symmetry
- Compose and decompose two dimensional shapes by attributes and properties

Measurement

- Identify and count coins and bills, use currency for problem solving up to twenty dollars

- Make change for money up to one dollar
- Identify equivalent combinations up to one dollar
- Tell time to the hour, half hour and five minutes using analog and digital clocks
- Measure using standard (inches and feet) and non-standard both vertically and horizontally
- Compare and order objects using lengths and weights
- Recognize mass as a quantitative measurement
- Select and use standard and non-standard units to estimate measurement

Statistics and Probability

- Use patterns and graphing to solve problems, make predictions and draw conclusions
- Collect and record data (using tallies) related to questions
- Develop estimation and prediction skills and strategies relating to a set of data
- Construct charts and graphs to display and analyze data
- Compare and interpret data in terms of describing quantity