



Mrs. Catherine Koysza
Augusta Circle Elementary School
Syllabus for 2008-2009

Subject: Mathematics
Grade Level: 2nd

Topics of Study for 1st Quarter

Addition and Subtraction

- 2-2.1 Generate estimation strategies to determine the approximate number of objects in a set of no more than 1,000 objects.
- 2-2.2 Represent quantities in word form through *twenty*.
- 2-2.3 Represent multiples of ten in word form through *ninety*.
- 2-2.4 Compare whole-number quantities through 999 by using the terms *is less than*, *is greater than*, and *is equal to* and the symbols $<$, $>$, and $=$.
- 2-2.8 Generate addition and subtraction strategies to find missing addends and subtrahends in number combinations through 20.
- 2-2.9 Generate strategies to round numbers through 90 to the nearest 10.
- 2-2.10 Analyze the magnitude of digits through 9,999 on the basis of their place values.

Numbers and Patterns to 100

- 2-3.1 Analyze numeric patterns in skip counting that uses the numerals 1 through 10.
- 2-3.2 Translate patterns into rules for simple multiples.
- 2-3.3 Analyze relationships to complete and extend growing and repeating patterns involving numbers, symbols, and objects.
- 2-3.4 Identify quantitative and qualitative change over time.
- 2-3.5 Analyze quantitative and qualitative change over time.

Data and Graphing

- 2-6.1 Create survey questions to collect data.
- 2-6.2 Organize data in charts, pictographs, and tables.
- 2-6.3 Infer trends in a data set as increasing, decreasing, or random.
- 2-6.4 Predict on the basis of data whether events are more likely or less likely to occur.

Major Topics of Study for 3rd Quarter

Geometry and Probability

- 2-4.1 Analyze the three-dimensional shapes spheres, cubes, cylinders, prisms, pyramids, and cones according to the number and shape of the faces, edges, corners, and bases of each.
- 2-4.2 Identify multiple lines of symmetry.
- 2-4.3 Predict the results of combining and subdividing polygons and circles.
- 2-6.4 Predict on the basis of data whether events are more likely or less likely to occur.

Multiplication and Division

- 2-2.5 Interpret models of equal grouping (multiplication) as repeated addition and arrays.
- 2-2.6 Interpret models of sharing equally (division) in as repeated subtraction and arrays.

Measurement

- 2-5.3 Use appropriate tools to measure objects to the nearest whole unit: measuring length in centimeters, feet, and yards; measuring liquid volume in cups, quarts, and gallons; measuring weight in ounces and pounds; and measuring temperature on Celsius and Fahrenheit thermometers.
- 2-5.4 Generate common measurement referents for feet, yards, and centimeters.
- 2-5.5 Use common measurement referents to make estimates in feet, yards, and centimeters.
- 2-5.6 Predict whether the measurement will be greater or smaller when different units are used to measure the same object.
- 2-5.9 Recall equivalencies associated with length and time: 12 inches = 1 foot, 3 feet = 1 yard, 60 minutes = 1 hour, and 24 hours = 1 day.

Major Topics of Study for 2nd Quarter

Money

- 2-5.1 Use a counting procedure to determine the value of a collection of coins and bills.
- 2-5.2 Use coins to make change up to one dollar.

Adding and Subtracting Two-Digit Numbers

- 2-2.1 Generate estimation strategies to determine the approximate number of objects in a set of no more than 1,000 objects.
- 2-2.3 Represent multiples of ten in word form through *ninety*.
- 2-2.4 Compare whole-number quantities through 999 by using the terms *is less than*, *is greater than*, and *is equal to* and the symbols $<$, $>$, and $=$.
- 2-2.9 Generate strategies to round numbers through 90 to the nearest 10.
- 2-2.10 Analyze the magnitude of digits through 9,999 on the basis of their place values.
- 2-2.7 Generate strategies to add and subtract pairs of two-digit whole numbers with regrouping.

Major Topics of Study for 4th Quarter

Time and Calendar

- 2-5.7 Use analog and digital clocks to tell and record time to the nearest quarter hour and to the nearest five-minute interval.
- 2-5.8 Match *a.m.* and *p.m.* to familiar situations.
- 2-5.9 Recall equivalencies associated with length and time: 12 inches = 1 foot, 3 feet = 1 yard, 60 minutes = 1 hour, and 24 hours = 1 day.

Numbers and Patterns to 1,000

- 2-3.1 Analyze numeric patterns in skip counting that uses the numerals 1 through 10.
- 2-3.2 Translate patterns into rules for simple multiples.
- 2-3.3 Analyze relationships to complete and extend growing and repeating patterns involving numbers, symbols, and objects.
- 2-3.4 Identify quantitative and qualitative change over time.
- 2-3.5 Analyze quantitative and qualitative change over time.



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Throughout the Year

- 2-1.1 Apply substantive mathematical problem-solving strategies.
- 2-1.2 Generate conjectures and exchange mathematical ideas.
- 2-1.3 Explain and justify answers to simple problems.
- 2-1.4 Analyze patterns by reasoning systematically.
- 2-1.5 Generalize mathematical concepts.
- 2-1.6 Use a variety of forms of mathematical communication.
- 2-1.7 Generalize connections among mathematics, the environment, and other subjects.
- 2-1.8 Use multiple informal representations to convey mathematical ideas.