

Jackson Area Catholic Schools
Mathematics Academic Standards
for
Second Grade

Numbers and Operations

A. Understand place value

- N.ME.02.01 The student will count to 1000 by 5's, 10's and 100's starting from any number in the sequence.
- N.ME.02.02 The student will identify numbers as odd and even.
- N.ME.02.03 The student will read and write numbers to 1000 in numerals, words, and expanded form, and relate them to the quantities they represent.
- N.ME.02.04 The student will compare and order numbers to 1000; use the symbols $>$, $=$, and $<$.
- N.ME.02.05 The student will count orally by 3's and 4's starting with 0, and by 2's, 5's, and 10's starting from any whole number.
- N.ME.02.06 The student will express numbers through 999 using place value (e.g., 137 is 1 hundred, 3 tens, and 7 ones); use concrete materials.

B. Add and subtract whole numbers

- N.FL.02.07 The student will decompose 100 into addition pairs (e.g., $99 + 1$, $98 + 2$...).
- N.MR.02.08 The student will find the distance between numbers on the number line (e.g., how far is 79 from 26?).
- N.MR.02.09 The student will find missing values in open sentences (e.g., $42 + \underline{\quad} = 57$); use relationship between addition and subtraction.
- N.MR.02.10 The student, given a contextual situation that involves addition and subtraction using number through 99, will model using objects or pictures; explain in words; record using numbers and symbols; solve.

B. Add and subtract whole numbers (cont.)

- N.FL.02.11 The student will add fluently up to four two-digit numbers through 99, using strategies including formal algorithms; subtract fluently two numbers through 99.
- N.FL.02.12 The student will estimate the solution of an addition or subtraction problem to the nearest ten. Estimate the sum of two numbers with three digits.
- N.FL.02.13 The student will calculate mentally sums and differences involving; three-digit numbers and ones; three-digit numbers and tens; three-digit numbers and hundreds.

C. Understand meaning of multiplication and division

- N.MR.02.14 The student will understand multiplication as the result of counting the total number of objects in a set of equal groups (e.g., 3×5 gives the number of objects in 3 groups of 5 objects or $3 \times 5 = 5 + 5 + 5 = 15$).
- N.MR.02.15 The student will represent multiplication using array models.
- N.MR.02.16 The student will, given a situation involving groups of equal size or of sharing equally, represent with objects, words, and symbols; solve.

Measurement

A. Measure, estimate, add and subtract length

- M.UN.02.01 The student will measure lengths in meters, centimeters, inches, feet, and yards approximating to the nearest whole unit and using abbreviations: cm, m, in, ft, yd.
- M.TE.02.02 The student will estimate lengths using units of inches, feet, centimeters, and meters.
- M.PS.02.03 The student will compare lengths; add and subtract lengths (no conversion of units).

A. Measure, estimate, add and subtract length (cont.)

- M.PS.02.04 The student will use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units e.g., by using drawings (such drawings of rulers) and equations with a symbol for the unknown number to represent the problem.
- M.PS.02.05 The student will generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.

B. Tell time and solve time problems

- M.UN.02.05 The student, using both A.M. and P.M., will tell and write time from the clock face in 5 minute intervals and from digital clocks to the minute; include reading time: 9:15 as nine-fifteen and 9:50 as nine-fifty. Interpret time both as minutes after the hour and minutes before the next hour (e.g., 8:50 as eight-fifty and ten to nine). Show times by drawing hands on clock face.
- M.UN.02.06 The student will use the concept of duration of time (e.g., determine what time it will be half an hour from 10:15).

C. Record, add and subtract money

- M.UN.02.07 The student will read and write amounts of money using decimal notations (e.g. \$1.15).

D. Read thermometers

- M.UN.02.08 The student will read temperature using the scale on a thermometer in degrees Fahrenheit.

E. Solve measurement problems

- M.PS.02.09 The student will solve simple word problems involving length and money.

Geometry

A. Reason with shapes and attributes

- G.GS.02.01 The student will identify, describe, and compare familiar two-dimensional and three-dimensional shapes, such as triangles, rectangles, squares, circles, semi-circles, spheres, and rectangular prisms.
- G.GS.02.02 The student will recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes (Sizes are compared directly or visually, not compared by measuring.)
- G.SR.02.03 The student will partition circles and rectangles into two, three or four equal shares, describe the shares using the words halves, thirds, half of a third of, etc., and describe the whole as two halves, three thirds, four fourths. The student will recognize that equal shares of identical wholes need not have the same shape.
- G.GS.02.04 The student will partition a rectangle into rows and columns or same-size squares and count to find the total number of them.

B. Use coordinate systems

- G.LO.02.05 The student will find and name locations using simple coordinate systems such as maps and first quadrant grids.

Data and Probability

A. Create, interpret, and solve problems involving graphs

- D.RE.02.01 The student will make read and interpret pictographs and bar graphs using a scale representation with up to four categories.
- D.RE.02.02 The student will solve problems using information in pictographs and bar graphs.