

Nebraska City Public Schools
4th Math / Learner Wills

4.1.1 By the end of fourth grade, students will demonstrate place value of whole numbers through the millions and decimals to the hundredth place.

2nd Grade

TLW identify, read, and write numbers to 999.

TLW identify and write the place value of numbers to 999.

3rd Grade

TLW read and write numerals (in digits and words) to 999,999.

TLW round whole numbers to the nearest ten or hundred.

TLW state the place value of any whole number in a five digit number.

4th Grade

TLW read and write numbers to millions.

TLW read and write decimals to the hundredths place.

TLW compare and order whole numbers through the millions place using symbols

>, <, and =.

TLW compare and order decimals through the hundredths place using symbols

>, <, and =.

TLW identify the place value of any whole number in a 7 digit number.

TLW round numbers to the nearest named place through millions.

4.1.2 By the end of fourth grade, students will write and illustrate equivalences of whole numbers in expanded form, decimals, and fractions.

2nd Grade

TLW Identify, read, write fractions up to eighths as part of a whole.

TLW express fractions up to eighths as a part of sets.

TLW write numbers in expanded form up to 99

i.e. (80 + 7).

3rd Grade

TLW write numbers in expanded form through thousands.

TLW find equivalent proper fractions to tenths using manipulatives.

4th Grade

TLW write whole numbers in expanded form to the millions.

TLW write and illustrate equivalent fractions with denominators of 2, 4, 5, 8, 10, 12.

TLW write equivalent decimals
i.e. (.4 = .40).

4.1.3 By the end of fourth grade, students will describe and apply relationships between whole numbers, decimals, and fractions by order, comparison, and operation.

2nd Grade

TLW identify ordinal positions of whole numbers to 20.

TLW compare whole numbers using $<$, $>$, and $=$.

3rd Grade

TLW order and compare whole numbers using $<$, $>$, and $=$.

TLW use the relationship of operations to solve and to check a given problem i.e. fact families.

TLW apply the commutative property and the property of zero.

4th Grade

TLW order and compare common whole numbers, fractions to 12th's, and decimals to hundredths using the symbols $<$, $>$, and $=$.

TLW identify and write mixed numbers

TLW apply properties of math

(associative, commutative, property of zero, property of 1).

TLW convert decimals as fractions using denominators of 10 and 100.

4.1.4 By the end of fourth grade, students will identify examples of positive and negative numbers and zero.

2nd Grade

3rd Grade

4th Grade

TLW read a thermometer using above and below zero.

4.1.5 By the end of fourth grade, students will make change and count out in amounts up to \$20.00.

2nd Grade

TLW count money in amounts up to \$1.00 using half dollars, quarters, dimes, nickels, and pennies.

TLW add money up to \$1.00.

TLW make change using pennies up to 5 cents.

3rd Grade

TLW count money, up to \$20.00.

TLW make change in amounts up to \$10.00.

4th Grade

TLW develop skills in counting money up to \$20.00.

TLW count back change from purchase price to amount.

TLW calculate change through subtraction and choose correct bills and coins to make this amount.

4.2.1 By the end of fourth grade, students will estimate, add, subtract, multiply, and divide whole numbers without and with calculators and solve word problems.

2nd Grade

TLW choose addition or subtraction to solve equations or word problems.

TLW estimate whole numbers to the nearest ten.

TLW demonstrate accuracy of basic facts with additions and subtraction up to 18.

TLW find sums and differences up to three digit numbers with and without regrouping up to the tens place.

TLW use a calculator for skip counting and to check addition and subtraction problems.

3rd Grade

TLW demonstrate that the basic facts in addition and subtraction have been mastered up to 18.

TLW add and subtract accurately four digit numbers with regrouping.

TLW estimate sums and differences.

TLW use a calculator to solve equations in addition and subtraction up to ten thousands.

TLW demonstrate knowledge of the multiplication facts using 0,1, 2, 3,4 and 5.

TLW demonstrate knowledge of the division facts using 0, 1, 2, 3, 4 and 5.

4th Grade

TLW demonstrate accuracy of basic facts of addition (1-20), multiplication (1-144), & division (1-144).

TLW multiply 3 digit numbers by 2 digit factor.

TLW add and subtract numbers up to 5 digits without calculators.

TLW divide 3 digit numbers by 1 digit divisor.

TLW estimate products, quotients, sums and differences.

TLW use calculators to solve equations.

TLW choose correct operation and solve word problems.

4.2.2 By the end fourth grade, students will estimate, add, and subtract decimals without and with calculators and solve word problems.

2nd Grade

3rd Grade

TLW add and subtract decimals to the hundredths with and without calculators.

TLW solve word problems involving the addition and subtraction of money.

4th Grade

TLW add and subtract decimals to the hundredths place.

TLW solve word problems involving the addition and subtraction of money.

4.2.3 By the end of fourth grade, students will estimate, add, and subtract fractions with like denominators without calculators and solve word problems.

2nd Grade

3rd Grade

TLW identify and write fractions to name equal parts of regions.

TLW identify fractions as parts of sets.

TLW identify and write mixed numbers to name parts of a region.

4th Grade

TLW estimate and solve problems using fractions in addition and subtraction with common denominators.

TLW solve word problems using fractions in addition and subtraction with common denominators without reducing to the lowest terms.

4.3.1 By the end of fourth grade, students will estimate, measure, and solve word problems using metric units for linear measure, area, mass/weight, capacity and temperature.

2nd Grade

TLW estimate and measure length using centimeters and meters.

TLW estimate and measure temperature using Celsius.

TLW estimate and compare weight in kilograms and grams.

TLW estimate and compare liters.

3rd Grade

TLW choose the correct unit of metric measurement for linear measure, mass / weight, capacity, and temperature.

TLW measure and draw lines up to 20 centimeters.

TLW measure the mass / weight of an object within 5 grams.

4th Grade

TLW choose the correct unit of metric measurement for linear measure, mass / weight, capacity, and temperature.

TLW read a thermometer to the nearest degree Celsius.

TLW estimate and measure length to the nearest meter and / or centimeter.

TLW estimate and measure mass/ weight to the nearest gram.

TLW estimate and measure capacity to the nearest milliliter.

TLW solve word problems using metric units.

4.3.2 By the end of fourth grade, students will estimate, measure, and solve word problems using standard units for linear measure, area, mass/weight, capacity, and temperature.

2nd Grade

TLW estimate and measure length using inches, feet, yards.

TLW estimate and measure temperature using Fahrenheit.

TLW estimate and measure weight using pounds.

TLW estimate and measure capacity using cups and pints.

3rd Grade

TLW choose the correct unit of standard measurement for linear measure, mass / weight, capacity, and temperature.

TLW measure and draw lines to the nearest 1/4 of an inch.

TLW measure capacity up to one gallon.

TLW read a thermometer above zero.

4th Grade

TLW choose the correct unit of standard measurement for linear measure, mass / weight, capacity, and temperature.

TLW read a thermometer to the nearest degree Fahrenheit.

TLW estimate and measure length to the nearest foot and / or yard.

TLW estimate and measure mass/ weight to the nearest ounce and / or pound.

TLW estimate and measure capacity to the nearest cup, pint, quart and /or gallon.

TLW solve word problems using standard units.

4.3.3 By the end of fourth grade, students will tell and write correct time to the minute using an analog clock.

2nd Grade

TLW accurately tell and write the correct time to the nearest 5 minute interval.

3rd Grade

TLW tell the correct time to the minute using an analog clock.

4th Grade

TLW read and write time to the nearest minute.

TLW identify time of day.
(a.m. / p.m.)

4.3.4 By the end of fourth grade, students will measure and determine the perimeter of a many-sided figure without a formula using standard and metric units of measure.

2nd Grade

3rd Grade

TLW measure and determine the perimeter of a many-sided figure using standard units of measure.

4th Grade

TLW measure perimeter and determine sided figures using standard and metric units.

4.4.1 By the end of fourth grade, students will identify, describe, and create two and three dimensional geometric shapes.

2nd Grade

TLW identify 2 and 3 dimensional geometric shapes.

3rd Grade

TLW identify 2 dimensional geometric figures up to 6 sides.

TLW identify sphere, pyramid, rectangular prism, cube, cone, and cylinder.

4th Grade

TLW identify and create 2 dimensional geometric figures up to 8 sides.

TLW identify and create sphere, square pyramid, rectangular prism, cube, cone, and cylinder.

4.4.2 By the end of fourth grade, students will identify and draw points, lines, line segments, rays, and angles.

2nd Grade

3rd Grade

TLW identify points, lines, segments, rays, and angles.

4th Grade

TLW identify and draw points, lines, line segments and rays.

TLW identify angles.

4.4.3 By the end of fourth grade, students will identify, analyze, and compare two-dimensional geometric figures using congruence, symmetry, similarity, and simple transformations.

2nd Grade

TLW identify and compare characteristics of 2 dimensional geometric figures as they relate to symmetry and similarity i.e. (circles, squares, triangles and rectangles).

3rd Grade

TLW identify similar and congruent figures.

TLW identify lines of symmetry.

4th Grade

TLW identify line(s) of symmetry.

TLW identify and compare similar and congruent figures.

TLW analyze shapes by transformation (slide, flip, turn).

4.5.1 By the end of fourth grade, students will collect, organize, record, and interpret data and describe the findings.

2nd Grade

TLW collect, organize and record data using a bar graph.

TLW interpret and describe the findings of a bar graph.

3rd Grade

TLW collect, construct, and interpret data in graphs, tables, and charts.

4th Grade

TLW collect and organize data for charts, tables and graphs.

TLW interpret tables, charts, and graphs and draw valid conclusions.

4.6.1 By the end of fourth grade, students will use and interpret variables and mathematical symbols to write and solve one-step equations.

2nd Grade

3rd Grade

TLW solve problems involving a missing numeral in a mathematical equation.

TLW identify and use the following symbols:

+ - = > < ÷ ×

4th Grade

TLW interpret and solve addition, subtraction, multiplication and division problems involving a missing numeral.

TLW identify and use the following symbols:

+ - = > < ÷ × * ()

4.6.2 By the end of fourth grade, students will identify, describe, and extend arithmetic patterns, using concrete materials and tables.

2nd Grade

TLW identify, describe, and extend an arithmetic pattern using concrete material.

3rd Grade

TLW identify, describe, and extend simple arithmetic patterns i.e. skip counting.

4th Grade

TLW identify, describe and extend complex arithmetic pattern patterns.

TLW identify, describe and extend complex arithmetic patterns using concrete materials and tables.