

First Grade *Everyday Mathematics*

Learning Goals--Units 1-9

Learning Goal By Assessment Rubric Indicators	Unit
Secure	
Count up and back by 1s, starting with any number up to and including 20	1
Count up to 20 objects	1
Count by 2s to 20; count by 5s to 50	2
Developing/Secure	
Count up and back by 1s on the number grid	2
Exchange pennies for nickels	2
Tell time to the nearest hour	2
Order and compare numbers to 22	4
Tell time to the nearest half-hour	4
Understand place value for 10s and 1s	8
Know addition facts for +1, +0, doubles and sums of 10	8
Developing	
Count by 5s to 40	1
Count by 2s to 40	1
Write numbers from 1 to 20	1
Compare pairs of numbers less than 16	1
Write and count tallies	1
Calculate the values of various combinations of pennies and nickels	2
Find complements of 10	2
Solve simple addition and subtraction number stories	2
Identify and complete patterns	2
Solve simple addition and subtraction problems by skip counting on the number line and the number grid	3
Identify numbers as odd and even	3
Know the values of pennies, nickels, and dimes, and calculate the value of combinations of these coins	3
Tell time to the nearest half-hour	3
Solve simple number stories	3, 4, 5, 8
Find simple sums and missing addends	4
Calculate the value of coin combinations	4
Understand place value for longs and cubes	5
Compare numbers using < and >	5
Know +1, and +0, doubles and sums of 10 addition facts	5
Find many names for a number	6
Know addition facts	7
Count sets of quarters, dimes, nickels, and pennies	8
Identify and use patterns on a number grid	9
Beginning/Developing	
Complete Frames-and-Arrows diagrams	3
Use standard units for measuring length	4
Learn simple addition facts	6
Calculate the value of coin combinations--"P," "N," "D," and "Q"	6
Sort and identify objects by attributes	7
Identify polygons and know their characteristics	7
Identify fractional parts of regions and sets with a focus on unit fractions	8
Identify fractional parts of a region	9

Learning Goal By Assessment Rubric Indicators

Unit

Beginning

Find missing numbers and/or the missing rule in "What's My Rule?" problems	5
Measure objects to the nearest centimeters	6
Understand digital notation for time	6
Identify 3-dimensional shapes and know their characteristics	7
Identify symmetrical figures	7
Make change for amounts less than \$1	8
Solve 2-digit addition and subtraction problems	9
Compare fractions less than 1	9
Find equivalent fractions	9

Second Grade *Everyday Mathematics*

Learning Goals--Units 1-12

Learning Goal By Assessment Rubric Indicators Unit

Secure

Count by 2s, 5s and 10s	1
Make tallies and give the total	1
Know "easier" addition facts	2
Construct fact families for addition and subtraction	2
Complete simple Frames-and-Arrows diagrams	2
Solve simple addition number stories	2
Find equivalent names for numbers	2
Identify place value in 2-digit and 3-digit numbers	3
Show "P," "N," "D," and "Q" for a given amount	3
Know all addition facts	3
Know easy subtraction facts	3
Add and subtract multiples of 10	4
Identify 2-dimensional shapes	5
Add three 1-digit numbers mentally	6
Know complements of 10	7
Count by 2s, 5s, and 10s and describe the patterns	7
Find missing addends for the next multiple of 10	7
Solve number-grid puzzles	7
Plot data on a bar graph	7
Shade a specified fractional part of a region	8
Give the fraction name for the shaded part of a region	8
Use a ruler, tape measure, and meter/yardstick correctly	9
Read and write money amounts in decimal notation	10
Use equivalent coins to show money amounts in different ways	10
Use a calculator to compute money amounts	10
Know exchange values of U.S. coins	10
Know and express automatically the values of digits in 2-, 3- and 4-digit numbers	10
Multiply numbers with 0 or 1 as a factor	11
Tell time to 5-minute intervals	12
Demonstrate calendar concepts and skills	12
Compare quantities from a bar graph	12

Developing/Secure

Know "harder" addition facts	2
Know "easier" subtraction facts	2
Complete "What's My Rule?" tables	2
Solve simple subtraction number stories	2
Tell time to 5-minute intervals	3
Draw line segments	5
Add and subtract with multiples of 10	6
Solve addition and subtraction number stories	6
Measure to the nearest inch	7
Measure to the nearest centimeter	7
Identify equivalencies for inches, feet, and yards	9
Construct multiplication/division fact families	12
Multiply numbers with 2, 5, and 10 as a factor	12

Developing

Find values of coin and bill combinations	1
Know "easy" addition facts	1
Identify place value for ones, tens and hundreds	1
Complete number sequences; identify and use number patterns to solve problems	1
Find equivalent names for numbers	1
Compare numbers: write symbols $<$, $>$, and $=$	1
Know "harder" subtraction facts	2
Solve Frames-and-Arrows problems having two rules	2
Make change	2
Know more difficult subtraction facts	2
Devise and use strategies for finding sums of 2-digit numbers	3
Devise and use strategies for finding differences of 2-digit numbers	3
Estimate approximate costs and sums	3
Read $^{\circ}\text{F}$ on a thermometer	4
Identify 3-dimensional shapes, such as rectangular prisms, cylinders, pyramids, cones, and spheres	5
Identify symmetrical figures	5
Find common attributes of shapes	5
Identify parallel and nonparallel line segments	5
Use the trade-first method to solve 2-digit subtraction problems	6
Make ballpark estimates of exact answers	6
Model multiplication problems with arrays	6
Add three 2-digit numbers mentally	6, 7
Find missing addends for any multiple of 10	7
Find the median (middle value) of a data set	7
Understand fractions as names for equal parts of a region or set	8
Understand that the amount represented by a fraction depends on the size of the whole (ONE)	8
Shade a specified fractional part of a collection	8
Give the fraction name for the shaded part of a collection	8
Recognize equivalent fraction names	8
Measure to the nearest $\frac{1}{2}$ inch	9
Measure to the nearest $\frac{1}{2}$ cm	9
Use appropriate units for measurement and recognize sensible measurements	9
Find area concretely	9
Find perimeter concretely	9
Solve money stories involving change	10
Estimate totals for "ballpark" check of exact answers	10
Know and express automatically the values of digits in 5-digit numbers	10
Estimate and solve addition and subtraction number stories with dollars and cents	11
Solve 1-digit multiplication stories (multiples of equal groups)	11
Solve simple division stories (equal sharing and equal groupings)	11
Multiply numbers with 2, 5, or 10 as a factor	11
Construct multiplication/division fact families	11
Make difference and ratio comparisons	11
Determine the median, maximum, minimum, and range of a data set	12

Beginning/Developing

Solve stories about multiples of equal groups	6
Solve equal-grouping and equal-sharing division problems	6
Compare fractions	8
Identify equivalencies for mm, cm, dm and m	9

Beginning

Use parentheses in number models	10
Use alternate names for times of day	12
Know "harder" multiplication facts	12
Determine the mode of a data set	12

Third Grade *Everyday Mathematics*

Learning Goals--Units 1-11

Learning Goal By Assessment Rubric Indicators	Unit
Secure	
Know basic addition facts	1
Know basic addition and subtraction facts	2
Complete fact and number families	2
Solve addition and subtraction multidigit number stories	2
Add multidigit numbers	2
Subtract multidigit numbers	2
Measure line segments to the nearest 1/4 inch	3
Measure line segments to the nearest centimeter	3
Know multiplication facts having 0 or 1 as a factor	4
Read, write, and compare whole numbers up to 5 digits	5
Identify place value in whole numbers up to 5 digits	5
Know multiplication facts from the first set of Fact Triangles	6
Identify right angles	6
Identify and name 2-D and 3-D shapes	6
Identify symmetric figures and draw lines of symmetry	6
Developing/Secure	
Count by 10s and 100s	1
Apply place-value concepts in 4-digit numbers	1
Tell and show times to the nearest minute	1
Count combinations of bills and coins and write the total in dollars-and-cents notation	1
Find equivalent names for numbers	1
Use basic facts to solve fact extensions	2
Complete "What's My Rule?" tables	2
Know multiplication facts having 2, 5, or 10 as a factor	4
Complete multiplication/division fact families	4
Know multiplication facts from the first set of Fact Triangles	5
Make a bar graph	10
Developing	
Identify and use number patterns to solve problems	1
Estimate answers to multidigit addition and subtraction problems	2
Find the perimeter of a polygon	3
Find the area of a rectangular region divided into square units	3
Solve number stories involving equal groups by using multiplication	4
Solve number stories involving equal sharing and equal grouping	4
Know multiplication facts having 3 or 4 as one factor and 2 through 7 as the other factor	4
Compare and order decimals	5
Identify place value in decimals	5
Read and write 1- and 2-digit decimals	5
Identify, draw, and name line segments, lines and rays	6
Draw parallel and intersecting line segments, lines and rays	6
Draw angles as records of rotations	6
Recognize and know square products	7
Know multiplication facts from second set of Fact Triangles	7
Solve extended multiplication facts to tens x tens	7
Identify fractional parts of a set	8
Identify fractional parts of a region	8

Learning Goal By Assessment Rubric Indicators

Unit

Developing Continued...

Solve extended multiplication facts to hundreds x hundreds	9
Solve number stories involving equal shares and equal groups	9
Find the median of a data set	10
Measure in centimeters and inches	10
Know units of measure	10
Make a frequency table	10
Know multiplication facts	10

Beginning/Developing

Understand function and placement of parentheses in number sentences	7
Make ballpark estimates for sums and products	7
Identify fractions on a number line	8
Find equivalent fractions	8
Solve fraction number stories	8
Use the partial-products algorithm or the lattice method to multiply multidigit numbers by 1- or 2-digit numbers	9
Find factors of a number	9
Interpret remainders in division problems	9
Find the volume of rectangular prisms	10
Find the mean of a data set	10
Understands and uses the language of probability	11
Uses fractions to record probability of events	11
Uses random draws to predict outcomes	11
Collects and organizes data for use in predicting outcomes	11
Understands area model of probability and solves simple spinner problems	11

Beginning

Read, write, and compare 6- and 7-digit whole numbers	5
Read and write 3-digit decimals	5
Compare and order fractions	8
Convert between mixed numbers and fractions	8
Solve number stories involving positive and negative numbers	9

Fourth Grade *Everyday Mathematics*

Learning Goals--Units 1-12

Learning Goal By Assessment Rubric Indicators

Unit

Secure

Name, draw, and label line segments, lines and rays	1
Name, draw, and label angles, triangles, and quadrangles	1
Identify and describe right angles and parallel lines and line segments	1
Solve addition and subtraction facts	1
Use the statistical landmarks maximum and minimum	2
Have a successful strategy for subtracting multidigit numbers	2
Have a successful strategy for adding multidigit numbers	2
Read and write numerals to hundred-millions; give the value of the digits in numerals to hundred-millions	2
Give equivalent names for numbers	2
Solve basic multiplication facts	3
Understand the relationship between multiplication and division	3
Draw and measure line segments to the nearest centimeter	4
Use dollars-and-cents notations	4
Compare large numbers	5
Estimate sums	5
Identify the whole for fractions	7
Identify fractional parts of a collection of objects	7
Identify fractional parts of regions	7
Give equivalencies between hundredths-fractions, decimals and percents	9
Use a calculator to rename any fractions as a decimal or percent	9
Use a transparent mirror to draw the reflection of a figure	10
Identify lines of symmetry, lines of reflection, reflected figures, and figures with line symmetry	10
Solve rate problems, using rate tables as necessary	12

Developing

Identify properties of polygons	1
Classify quadrangles according to side and angle properties	1
Display data with a line plot, bar graph, or tally chart	2
Use the statistical landmarks median, mode, and range	2
Solve open sentences	3
Insert parentheses to make true number sentences; solve problems with parentheses	3
Determine whether number sentences are true or false	3
Use and explain strategies for solving addition and subtraction number stories	3
Use a map scale to estimate distances	3
Solve basic division facts	3
Express metric measures with decimals	4
Convert between metric measures	4
Read and write decimals to thousandths	4
Compare and order decimals	4
Draw and measure line segments to the nearest millimeter	4
Use personal references to estimate lengths in metric units	4
Solve 1- and 2-place decimal addition and subtraction problems and number stories	4
Solve extended multiplication facts	5
Make magnitude estimates for products of multidigit numbers	5
Solve multidigit multiplication problems	5
Round whole numbers to a given place	5
Read and write numbers to billions; name the values of digits in numerals to billions	5
Have a successful strategy for solving whole-number division problems	6
Express the remainder of a whole-number division problem as a fraction and the answer as a mixed number	6
Interpret the remainder in division problems	6
Name and locate points specified by ordered number pairs on a coordinate grid	6

Developing Continued...

Identify acute, right, obtuse, straight, and reflex angles	6
Make turns and fractions of turns; relate turns and angles	6
Use a circular protractor and a half-circle protractor to measure and draw angles	6
Use and explain strategies for solving multiplication and division number stories	6
Rename fractions with denominators of 10 and 100 as decimals	7
Apply basic vocabulary and concepts associated with chance events	7
Compare and order fractions	7
Find fractions equivalent to a given fraction	7
Use formulas to find area of rectangles, parallelograms, and triangles	8
Find the perimeter of a polygon	8
Estimate the area of a figure by counting unit squares and fractions of unit squares inside the figure	8
Find a percent or a fraction of a number	9
Give equivalencies between "easy" fractions (fourths, fifths, and tenths), decimals, and percents	9
Translate figures	10
Add positive and negative integers	11
Estimate the weight of objects in ounces or grams; weigh objects in ounces or grams	11
Solve cube-stacking volume problems	11
Describe properties of geometric solids	11
Find unit rates	12
Calculate unit prices to determine which product is the "better buy"	12
Evaluate the reasonableness of rate data	12
Collect and compare rate data	12

Beginning

Use a compass and straightedge to construct geometric figures	1
Use exponential notation to represent powers of 10	5
Identify locations on Earth for which latitude and longitude are given; find latitude and longitude for given locations	6
Add and subtract fractions	7
Make and interpret scale drawings	8
Use an estimation strategy to divide decimals by whole numbers	9
Use an estimation strategy to multiply decimals by whole numbers	9
Add integers	10
Rotate figures	10
Use a formula to calculate the volume of rectangular prisms	11
Subtract positive and negative integers	11
Find unit rates	12

Fifth Grade *Everyday Mathematics*

Learning Goals--Units 1-12

Learning Goal By Assessment Rubric Indicators	Unit
Secure	
Draw arrays to model multiplication	1
Know basic multiplication facts	1
Identify even and odd numbers	1
List the factors of a number	1
Find the sum and difference of multidigit whole numbers and decimals	2
Identify the maximum, minimum, mode and mean for a data set	2
Identify place value in numbers to billions	3
Know properties of polygons	3
Define and create tessellations	3
Know place value to hundredths	4
Find and use data landmarks	6
Convert among fractions, decimals and percents	8
Convert between fractions and mixed or whole numbers	8
Find common denominators	8
Understand the concept of area of a figure	9
Use a formula to find the area of rectangles	9
Use formulas to find the areas of polygons and circles	11
Know the properties of geometric solids	11
Find and identify factors of numbers	12
Find the prime factorizations of numbers	12
Developing/Secure	
Use a divisibility test to determine if a number is divisible by another number	1
Identify prime and composite numbers	1
Understand how square numbers and their square roots are related	1
Make magnitude estimates	2
Find the product of multidigit whole numbers and decimals	2
Know place value to billions	2
Estimate the measure of an angle	3
Measure an angle to within 2°	3
Identify types of angles	3
Identify types of triangles	3
Convert between fractions and mixed numbers	5
Find equivalent fractions	5
Convert among fractions, decimals, and percents	6
Understand and apply exponential notation	7
Identify number sentences; tell whether a number sentence is true or false	7
Understand and apply the use of parentheses in number sentences	7
Order and compare positive and negative numbers	7
Use an algorithm to add mixed numbers	8
Order and compare fractions	8
Plot ordered pairs on a one-quadrant coordinate grid	9
Identify the base and height of triangles and parallelograms	9
Use a formula to find the area of triangles and parallelograms	9
Solve one-step pan-balance problems	10
Interpret mystery line plots and graphs	10
Use formulas to find the volume of prisms and cylinders	11
Solve ratio and rate number stories	12

Developing

Round numbers to designated places	2
Determine angle measures based on relationships between angles	3
Find the quotient and remainder of a whole number divided by a 1-digit whole number	4
Find the quotient and remainder of a whole number divided by a 2-digit whole number	4
Make magnitude estimates for quotients of whole and decimal numbers divided by whole numbers	4
Interpret the remainder in division number stories	4
Determine the value of a variable; use this value to complete a number sentence	4
Order and compare fractions	5
Convert between fractions and percents	5
Draw a circle graph for a set of data	5
Measure pieces of a circle graph; interpret a circle graph	5
Add and subtract fractions with common denominators	6
Add and subtract fractions with unlike denominators	6
Understand how sample size affects results	6
Find a common denominator	6
Understand and apply powers of 10	7
Understand and apply order of operations to evaluate expressions and solve number sentences	7
Add and subtract positive and negative numbers	7
Use an algorithm to multiply fractions	8
Use an algorithm to subtract mixed numbers with like denominators	8
Find a percent of a number	8
Plot ordered pairs on a four-quadrant coordinate grid	9
Understand the concept of volume of a figure	9
Use a formula to find the volume of prisms	9
Write algebraic expressions to describe situations	10
Represent rate problems as formulas, graphs, and tables	10
Use formulas to find circumference and area of a circle	10
Distinguish between circumference and area of circle problems	10
Find the greatest common factor of two numbers	12
Find the least common multiple of two numbers	12

Beginning/Developing

Rename numbers written in exponential notation	1
Add fractions with like denominators	5
Construct stem-and-leaf plots	6
Read and interpret stem-and-leaf plots	6
Understand and apply scientific notation	7
Use the Multiplication Counting Principle to find the total number of possible outcomes of a sequence of choices	12

Beginning

Find the prime factorization of numbers	1
Write and solve open sentences for number stories	2
Divide decimal numbers by whole numbers with no remainders	4
Write and solve number sentences with variables for division number stories	4
Use an algorithm to multiply mixed numbers	8
Solve two-step pan-balance problems	10
Understand the relationship between the volume of pyramids and prisms, and the volume of cones and cylinders	11
Find the surface area of prisms	11
Understand how to find the surface area of cylinders	11
Understand the concept of capacity and how to calculate it	11
Use tree diagrams to find all possible ways a sequence of choices can be made	12
Compute the probability of outcomes when choices are equally likely	12

Sixth Grade Everyday Mathematics

Learning Goals--Units 1-10

Learning Goal By Assessment Rubric Indicators	Unit
Secure	
Find equivalent names for numbers	1
Identify statistical landmarks of data sets	1
Compute and understand the mean	1
Interpret and construct broken-line graphs	1
Interpret and construct bar graphs	1
Use exponential notation for large numbers	2
Read, write and compare numbers from thousandths to trillions	2
Add and subtract decimals	2
Estimate quotients and divide whole numbers	2
Mentally add 1-digit positive and negative numbers	3
Represent rates with formulas, tables and graphs	3
Convert between fractions and mixed numbers	3
Find the least common multiple of two numbers	3
Find the greatest common factor of two numbers	3
Add mixed numbers having fractions with like denominators	4
Add and subtract fractions with like and unlike denominators	4
Compare and order fractions	4
Rename numbers expressed by fractions, mixed numbers, decimals, and percents	4
Write fractions and mixed numbers in simplest form	4
Apply properties of sums of angle measures of triangles and quadrangles	5
Translate figures on a coordinate grid	5
Plot ordered number pairs in four quadrants; use ordered number pairs to name points in four quadrants	5
Draw or form a figure congruent to a given figure	5
Classify angles	5
Measure and draw angles using a protractor	5
Compare and order positive and negative numbers	6
Understand and apply the identity property for multiplication	6
Understand and apply the commutative property for addition and multiplication	6
Understand and apply the associative property for addition and multiplication	6
Solve "fraction-of-a-fraction" problems	7
Understand how increasing the number of trials affects experimental results	7
Use rate tables to solve problems	8
Evaluate expressions and formulas	8
Developing/Secure	
Use a Percent Circle to interpret circle graphs	1
Find opposites and reciprocals of numbers	6
Add, subtract, multiply, and divide positive and negative numbers	6
Perform operations in the correct order	6
Identify number sentences as true or false	6
Calculate probability in simple situations	7
Understand what constitutes a fair game	7
Understand and apply the concept of random numbers to probability situations	7
Use cross multiplication to solve open proportions	8
Solve rate number stories	8
Solve ratio number stories	8
Estimate equivalent percents for fractions	8
Solve division problems that involve decimals	8
Learning Goal By Assessment Rubric Indicators	Unit

Developing/Secure Continued...

Combine like terms to simplify expressions and equations	9
Apply the distributive property	9
Solve equations	9
Write and identify equivalent expressions and equivalent equations	9
Write and solve equations that represent problem situations	9
Use formulas to solve problems	9

Developing

Match mystery line plots with descriptions	1
Estimate products and multiply decimals	2
Divide two whole numbers; give the answer to a specified number of decimal places	2
Estimate the quotient and divide a decimal by a whole number	2
Multiply by positive and negative powers of 10	2
Interpret number-and-word notation for large numbers	2
Use exponential notation for small numbers	2
Use a spreadsheet	3
Interpret mystery graphs	3
Write algebraic expressions to represent situations	3
Represent data with circle graphs	4
Multiply fractions and mixed numbers	4
Add and subtract mixed numbers having fractions with unlike denominators	4
Subtract mixed numbers having fractions with like denominators	4
Find a percent of a number	4
Apply properties of supplementary angles and vertical angles	5
Apply properties of angles formed by two parallel lines and a transversal	5
Apply properties of angles of parallelograms	5
Calculate the degree measure of each sector in a circle graph; use a protractor to construct the graph	5
Use a compass and straightedge to construct geometric figures	5
Solve equations	6
Use an algorithm to add, subtract, multiply, and divide fractions and mixed numbers	6
Find opposites and reciprocals of numbers	6
Construct and interpret Venn diagrams	7
Write open proportions to model problems	8
Solve percent problems	8
Solve problems that involve a size-change factor	8
Simplify expressions and equations with parentheses	9

Beginning

Interpret and construct step graphs	1
Translate between scientific notation and standard notation with and without a calculator	2
Use variable to describe general patterns	3
Solve and graph solutions for inequalities	6
Understand and use probability tree diagrams to solve problems	7
Identify and use notation for semiregular tessellations	10
Identify figures that can tessellate	10
Create nonpolygonal, translation tessellations	10
Explore rotation and point symmetry	10
Explore cross sections of solids	10
Perform topological transformations	10