

Grade 3

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DATE COMPLETED

**NUMBERS AND OPERATIONS**

Recognize, read, and write numbers to describe:

Decimals to tenths, hundredths.	I
Money in dollars and cents.	m
Number words zero to twenty.	m
Decade words.	m
Roman numerals.	D
"Set."	D

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Recognize, read, and write numbers to describe:

Whole numbers to 999.	m
Whole numbers to six digits.	M
Natural, counting numbers.	M

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Sequence numbers (counting skills):

Count by ones to 999.	m
Count backward from 20.	m
Count backward from any given number, up to 100.	M
Use skip counting from any given number by 2's, 5's, 10's, and 100's.	m
Use skip counting from any given number by thousands.	M

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Recognize, read, and write place value:

To the left of the decimal point by one, two, and three digits.	m
To the left of the decimal point through six digits.	I
To the right of the decimal point by one digit.	I

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Round numbers:

To the nearest ten, hundred.	M
To the nearest thousand.	I
To the nearest dollar.	I

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Compare sets, numbers:

Use signs of equality and inequality:

use =	m
use ≠, >, <	M

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Compare and order:

Numbers beyond 1000.	I
Odd and even numbers.	M

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Add.

Estimate.	D
Master facts to 18.	m
Define addend and sum.	m
Compute, no regrouping (4 or more one digit addends).	M

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Compute, with regrouping:

2 or more 2-digit numbers.	m
2 or more 3-digit and 4-digit numbers.	M
Apply Commutative property of addition.	M
Apply Associative property of addition.	D
Add using mental math.	D

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Subtract.

Estimate.	D
Master facts to 18.	m
Define subtrahend, minuend, difference.	M
Compute multi-digit numbers with no regrouping.	m
Compute with regrouping two 3-digit numbers.	M
Compute with regrouping, any two numbers.	I
Subtract with dollars and cents.	I
Subtract using a number line.	m
Subtract using mental math.	D

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Represent and solve problems involving multiplication and division.\*

Interpret products of whole numbers within 100, e.g., interpret $5 \times 7$ as the total number of objects in 5 groups of 7 objects each. <i>For example, describe a context in which a total number of objects can be expressed as <math>5 \times 7</math>.</i> *	M
Interpret whole-number quotients of whole numbers, e.g., interpret $56/8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. <i>For example, describe a context in which a number of shares or a number of groups can be expressed as <math>56/8</math>.</i> *	M

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Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.*	D
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Understand properties of multiplication and the relationship between multiplication and division\*.

Apply Associative property of multiplication. $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$ , then $15 \times 2 = 30$ . *	D
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Apply Commutative Property of Multiplication. $5 \times 3 = 15$ and $3 \times 5 = 15$ . *	M
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Apply Distributive Property. Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$ , one can find $8 \times 7$ as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$ . *	I
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Multiply and divide within 100\*.

Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $25 \times 2 = 50$ , one knows $50 / 2 = 25$ ) or properties of operations.*	M
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Compute products with factors up to $5 \times 5$ .	M
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Define multiplier, multiplicand, product, factor.	M
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Know from memory facts through 10.*	M
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Compute with no regrouping, 2-digit x 1-digit.	M
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Compute with no regrouping, 2-digit x 2-digit, 3-digit x 2-digit.	I
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Compute with regrouping, 2x1-digit, 2-x2-digit, 3-x2-digit.	I
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Write numbers using expanded notation	I
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Define divisor, dividend, quotient, remainder.	I
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Master division facts through 12.	D
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Compute with no remainder, 2-x1-digit, 3-x1-digit.	I
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Recognize, read, write, and apply numbers to describe:

Fractions:

One-half, one-third, one-fourth.	m
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Fifths through tenths.	M
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$2/3$ , $2/4$ , $3/4$ , and tenths.	I
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Denominators and numerators, like fractions.	I
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Calculate fractions as equal parts of a whole.	D
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Compare and solve inequalities involving fractions.	D
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Use estimation skills appropriately:

Estimate and use mental math with addition, subtraction, multiplication.	D
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Estimate and use mental math with division.	I
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**ALGEBRA**

Determine the unknown whole number in a multiplication or division equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations <math>8x=?=48</math>, <math>5= \_ /3</math>, <math>6x6=?</math>*</i>	I
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Use algebraic and analytical methods:

To understand patterns and relationships.	D
To identify unknown quantities, algebraic phrases.	D
To identify patterns.	D
To solve simple equations informally.	D

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**Measurement & Data**

Comparing and Ordering objects using appropriate units:

Length:

Inch, 1/2 inch, 1/4 inch.	M
1/8 inch, 1/16 inch.	D
Capacity (Volume) using milliliter, liter, kiloliter.	I/D
Weight/Mass using gram, kilogram.	I/D

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Compare and/or order objects using appropriate units:

Length: Foot/yard.	m
Length: Mile.	M
Length: Millimeter, centimeter, decimeter, meter.	D
Length: Kilometer.	I
Capacity: cup, pint, quart, gallon.	m
Weight: ounce, pound, ton.	m
Temperature: Fahrenheit.	m
Temperature: Celsius.	D

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Recognize, read, and write time (including solving word problems)\*:

Five minute intervals.	M
Minutes before and after.	D
AM and PM.	D
Digital, analog time.	M
Elapsed time, duration, without changing units.	D

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Elapsed time, duration, with changing units.	I
Sequence of events, timelines.	D
Schedules.	I

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Recognize, tell, and count money:

All coins.	m
One-, five-, and ten-dollar bills.	m
\$20, \$50, and \$100's.	M
Make change.	D

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**GEOMETRY**

Describe, model, draw, and classify:

Point.	M
Right angles.	I
Squares, rectangles.	m
Cube, cylinder, sphere, cone.	D
Prisms, triangular and rectangular.	D
Pyramid.	D
Symmetry, congruency.	D
Pentagons, hexagons, octagons.	D

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Define, compare, demonstrate, and calculate:

Area of a square, rectangle.	D
Circumference.	D
Perimeter.	D
Volume.	D

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Identify objects by location:

Left, right, North, South, East, West.	m
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Investigate and predict the result of:

Slide, turn, flip.	D
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Construct convincing arguments and proofs to solve problems using geometric figures and patterns.

Draw conclusions and communicate reasoning using simple materials, diagrams, technology.	D
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**STATISTICS AND PROBABILITY**

Format Questions.

Conduct experiments, surveys.	D
Demonstrate data collection methods.	D
Design data collection methods.	I

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Organize and construct data.

Identify, draw, label, analyze real graph.	m
Identify, draw, label, analyze picture graph, bar graph, Venn Diagram.	D
Identify, draw, label, analyze tables, circle graph, solid line graph.	I

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Discuss and analyze change:

By measuring and comparing quantities.	D
By using tables and graphs.	D

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**PROBLEM SOLVING**

Analyze and plan the problem determining the appropriate strategy by:

Drawing pictures, creating original problems, determining if information is sufficient to solve.	D
Using tables, charts, graphs, and diagrams, trial and error, working backwards, using patterns.	D
Estimating, and choosing the correct operation.	D
Check reasonableness.	D

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