

HORIZONS MATH LEARNING GOALS BY GRADE, K - 6

(Can Be Cut & Pasted Into WSLP's)

Kindergarten

There are 160 lessons in this Horizon Kindergarten Math Program. They will be covered (approximately) according to the following schedule below. The content covered by lessons 1 – 160, is noted below that.

September: Lessons 1 – 13

October: Lessons 14 – 32

November: Lessons 33 – 49

December: Lessons 50 – 63

January: Lessons 64 – 80

February: Lessons 81 – 99

March: Lessons 100 – 118

April: Lessons 119 – 132

May: Lessons 133 – 149

June: Lessons 150 - 160

Numbers, Order, & Value

Counting by 1s, 5s, 10s, 2s, and 4s to 100

- Recognition of all families to 100
- Writing of all families to 100
- Value of all single-digit numbers
- Naming the number that comes after for all families to 100
- Naming the number that comes before for all families to 100
- Naming the number that comes between for all families to 100
- Place value for 1's and 10's
- Recognition of ordinal numbers; even and odd numbers

Addition & Subtraction

Adding a single digit to all families without regrouping

- Subtracting a single digit from all families without regrouping

Ratios, Measurement, & Decimals

Recognition, value, and use of the penny, nickel, dime, quarter, half dollar, and dollar

- Naming time on the hour, half hour, quarter hour, and 5 minutes and recognition of digital time hours and minutes
- Naming days of the week, months of the year, and seasons
- Reading lengths in inches and centimeters and perimeter in inches
- Identify and count cup, quart, gallon, and liter

Fractions & Comparison

Comparisons of items and quantities that are different, pairs, twins, belong together, tall, short, long, larger number and smaller number

- Recognition of whole, $\frac{1}{2}$, $\frac{1}{3}$, and $\frac{1}{4}$

Equations, Colors, & Geometry

- Recognition of black, yellow, green, red, blue, brown, orange, and purple
- Recognition of circle, square, triangle, rectangle, octagon, cone, sphere, and cylinder
- Recognition of the direction and position of right, left, up, down, top, bottom, middle, inside, outside, first, next, last, front, and back

Graphs, Estimation, & Solving

Read and complete bar graphs and pictographs

- Determine what comes next

1st Grade

There are 160 lessons in this Horizon 1st Grade Math Program. They will be covered (approximately) according to the following schedule below. The content covered by lessons 1 – 160 is also noted below.

September: Lessons 1 – 13

October: Lessons 14 – 32

November: Lessons 33 – 49

December: Lessons 50 – 63

January: Lessons 64 – 80

February: Lessons 81 – 99

March: Lessons 100 – 118

April: Lessons 119 – 132

May: Lessons 133 – 149

June: Lessons 150 - 160

Numbers, Order, & Value

Counting by 1s, 2s, 5s, 10s, 3s, 6s, 9s, 4s, 8s, and 7s to 100, by 1s from 100-200, even and odd numbers, tally marks, word numbers to 100, and one-to-one correspondence

- Ordinal numbers to 10 and the number that comes between, after, or before a given number
- Distinguish between big and little, large and small, tall and short, less than and greater than, long and short, and equal and not equal
- Place value for 1's, 10's, and 100's

Addition & Subtraction

Facts from 1-18, two double and triple-digit numbers, three single and double-digit numbers, horizontal and vertical addition, addition with carrying in 1's, and word problems

- Facts from 1-18, two double and triple-digit numbers without borrowing, horizontal and vertical subtraction, and word problems

Ratios, Measurement, & Decimals

- Months of the year and days of the week
- Hour, half hour, and quarter hour
- Penny, nickel, dime, quarter, dollar, and adding
- Inches, centimeters, dozen, ounce, cup, pint, quart, gallon, and pound

Fractions & Comparison

$\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$, and $\frac{1}{8}$

- Groups

Equations, Colors, & Geometry

Circle, square, triangle, oval, diamond, octagon, sphere, cylinder, cube, and cone

Graphs, Estimation, & Solving

Bar graphs

- Numbers and events
- Rounding number on number line, height, length, and quantity

2nd Grade

There are 160 lessons in this Horizon 2nd Grade Math Program. They will be covered (approximately) according to the following schedule below. The content covered by lessons 1 – 160 is also noted below.

September: Lessons 1 – 13

October: Lessons 14 – 32

November: Lessons 33 – 49

December: Lessons 50 – 63

January: Lessons 64 – 80

February: Lessons 81 – 99

March: Lessons 100 – 118

April: Lessons 119 – 132

May: Lessons 133 – 149

June: Lessons 150 - 160

Numbers, Order, & Value

Counting by 1s, 5s, 10s, 2s, 3s, 6s, 9s, 4s, 8s, and 7s to 100, by 1s from 100-999, even and odd numbers, tally marks, word numbers to 999, and Roman numerals

- Ordinal numbers to 100 and the number that comes between, after, or before a given number
- Distinguish between greater than and less than and equal and not equal
- Place value for 1's, 10's, 100's, and 1,000's

Addition & Subtraction

Carrying in 1's, 10's, and 100's columns, two and three numbers with 1-4 digits, four numbers with 1-2 digits, horizontal and vertical addition, word problems, word sentences, and equations

- Borrowing in the 1's and 10's columns, two numbers with 1-4 digits, horizontal and vertical subtraction, word problems and sentences, and equations

Ratios, Measurement, & Decimals

Months of the year, days of the week, and abbreviations

- Hour, half hour, quarter hour, five minutes, and equivalents
- Penny, nickel, dime, quarter, and half dollar; one, five, ten, and twenty dollar bills; counting, adding, subtracting, and multiplying money
- Inches, centimeters, linear equivalents, English weight equivalents, liquid measure equivalents, dozen, optical illusion, and map reading
- Fahrenheit thermometer

Fractions & Comparison

- Fractional part of a whole, fractional part of a set, and fraction words
- Groups
- Comparison of two numbers

Equations, Colors, & Geometry

Circle, square, triangle, rectangle, oval, diamond, octagon, pentagon, hexagon, sphere, cylinder, cube, cone, pyramid, and symmetry

- Recognize and find area, perimeter, and volume

Graphs, Estimation, & Solving

Bar graphs, line graphs, pictographs, and grids

- Numbers, shapes, objects, and events
- Rounding number, height, length, and time

Multiplication & Division

Multiplication facts 0-10 and word problems

3rd Grade

There are 160 lessons in this Horizon 3rd Grade Math Program. They will be covered (approximately) according to the following schedule below. The content covered by lessons 1 – 160 is also noted below.

September: Lessons 1 – 13
December: Lessons 50 – 63
March: Lessons 100 – 118
June: Lessons 150 – 160

October: Lessons 14 – 32
January: Lessons 64 – 80
April: Lessons 119 – 132

November: Lessons 33 – 49
February: Lessons 81 – 99
May: Lessons 133 – 149

Numbers, Order, Value

- Word numbers to 1,000,000; expanded and standard form; counting by 1s, 2s, 3s, etc.; Roman numerals; and properties of one and zero
- Ordinal numbers, before/after, greater than and less than, equal and not equal, estimation, rounding numbers to ten and hundred, order principle, parenthesis, distributive property, and positive and negative numbers
- Place value for 1's, 10's, 100's, 1,000's, 10,000's, 100,000's, and 1,000,000's

Addition & Subtraction

Addend, sum, carrying to 4 digits, estimate answers, word problems and sentences, and equations

- Difference, minuend, subtrahend, borrowing, estimate answers, word problems, and equations

Ratios, Measurement & Decimals

Months of the year, days of the week, abbreviations, and word problems

- Hour, half hour, quarter hour, five minutes, minute, a.m. and p.m., equivalents, estimate time, word problems, and elapsed time
- Penny, nickel, dime, quarter, half dollar; one, five, ten, twenty dollar bills; counting, adding, subtracting, multiplying; adding and subtracting horizontally and vertically; rounding; and word problems
- English linear, liquid, weight, and equivalents; Metric linear, liquid, weight, and equivalents; dozen and map reading
- Fahrenheit and Celsius
- Decimal expressed in the tenths; relationship of fractions, mixed numbers, and decimals; add and subtract horizontal to vertical; and multiply single digit multiplier by dollars and cents

Fractions & Comparison

Fractional part of a whole, fractional part of a set, fraction words, equivalent fractions, mixed numbers, and renaming

- Comparison of two numbers and word problems

Equations & Geometry

Circle, square, triangle, rectangle, oval, diamond, octagon, pentagon, hexagon, sphere, cylinder, cube, cone, pyramid, trapezoid, rhombus, parallelogram, and rectangular prism; symmetry, congruent and similar shapes, lines, line segments, endpoints, rays, and angles

- Recognize and find perimeter and area of rectangles and squares
- Find volume of cubes and rectangular prisms

Graphing, Estimating

Solving Bar graphs, line graphs, pictographs, circle graphs, and grids

Multiplication & Division

Multiplication facts 1-10; word problems; multiplicand, multiplier, product, and factor; 2, 3, and 4-digit multiplicands with single-digit multiplier with and without carrying; multiplying by 10s, 100s, and 1,000s

- Division facts 1-10, 1 and 2-digit quotients without and with regrouping and with and without remainder

4th Grade

There are 160 lessons in this Horizon 4th Grade Math Program. They will be covered (approximately) according to the following schedule below. The content covered by lessons 1 – 160 is also noted below.

September: Lessons 1 – 13

October: Lessons 14 – 32

November: Lessons 33 – 49

December: Lessons 50 – 63

January: Lessons 64 – 80

February: Lessons 81 – 99

March: Lessons 100 – 118

April: Lessons 119 – 132

May: Lessons 133 – 149

June: Lessons 150 - 160

We'll cover approximately 1 lesson per day, completing the program by the end of the 180-day school year. The extra 20 days will be used to give extra coverage to review at the start of the school year, topics that are more difficult, reviewing for tests, and/or to review at the end of the school year.

Numbers, Order, Value

- Word numbers through hundred billion, expanded form, even and odd numbers, Roman numerals, divisibility, prime and composite, and prime factorization
- Place value for 1's, 10's, 100's, 1,000's, 10,000's, 100,000's, 1,000,000's, 10,000,000's, 100,000,000's, 1,000,000,000's, 10,000,000,000's, and 100,000,000,000's
- Ordinal numbers through 100; rounding to the nearest tenth, hundredth, and thousandth; greater than and less than; and equal and not equal.

Addition & Subtraction

Addition properties and terms; addition with 2, 3, 4, 5, and 6-digit numbers with carrying; equations; horizontal to vertical; column addition; missing addends; estimating; and adding money

- Subtraction properties and terms; subtraction with 2, 3, 4, 5, and 6-digit numbers with borrowing; equations; horizontal to vertical; estimating; and subtracting money

Ratios, Measurement & Decimals

Review telling time; a.m. and p.m.; determine century; time equivalents; elapsed time; calendar; and time zones

- Standard and metric linear, liquid, and weight equivalents; temperature reading and understanding Fahrenheit and Celsius; millimeter, centimeter, decimeter, meter, decameter, hectometer, and kilometer
- Fractions to decimals; word numbers to hundredth's place; comparing and ordering decimals; adding decimals vertically and horizontally; subtracting decimals; estimating decimals; estimating decimals with money
- Definition of a ratio; writing simple ratios; multiply and divide to find equal ratios

Fractions & Comparison

Fractional part of a whole; word fractions; part of a set; equivalent fractions; reducing fractions; adding and subtracting fractions with like and unlike denominators; adding and subtracting mixed numbers

Equations & Geometry

Shapes and solids; symmetry; congruent and similar figures

- Lines: line segment, ray, endpoint, parallel, intersecting, and perpendicular lines

- Angles: rays, vertex, acute, obtuse, and right
- Circles: diameter and radius
- Finding the perimeter, area, and volume of an object
- Addition, subtraction, multiplication, and division of equations

Graphs, Estimating, Solving

- Bar, line, pictograph, and circle
- Coordinate graphs
- Comparing graphs

Multiplication & Division

- Multiplication properties and terms; 3-digit times a single digit; multiplying by 10s, 100s, and 1,000s; 2-digit times a 2-digit and 3-digit times a 3-digit number; missing factors; money by a 2-digit number; estimating products
- Division properties and terms; 1-digit divisor, 1-digit quotient with and without remainders; zeros in the quotient; averaging

5th Grade

There are 160 lessons in this Horizon 5th Grade Math Program. They will be covered (approximately) according to the following schedule below. The content covered by lessons 1 – 160 is also noted below.

September: Lessons 1 – 13

October: Lessons 14 – 32

November: Lessons 33 – 49

December: Lessons 50 – 63

January: Lessons 64 – 80

February: Lessons 81 – 99

March: Lessons 100 – 118

April: Lessons 119 – 132

May: Lessons 133 – 149

June: Lessons 150 - 160

Numbers, Order, & Value

Number theory through hundred billion; review expanded form through hundred billion; review Roman numbers; divisibility; prime and composite; prime factorization; introduction to factor trees and exponents

- Place value to hundred billions
- Rounding to the nearest tenth, hundredth, and thousandth; greater than and less than; equal and not equal

Addition & Subtraction

Addition properties, terms, and facts; addition with 2, 3, 4, 5, and 6-digit numbers; equations; column addition; missing addends; estimating; adding money; more than one operation

- Subtraction properties, terms, and facts; subtraction with 2, 3, 4, 5, and 6-digit numbers; equations; estimating; subtracting money; more than one operation

Ratios, Measurement, & Decimals

Time; a.m. and p.m.; century; equivalents; elapsed time; calendar; time zones

- Counting change • Writing simple ratios
- Standard and metric linear, liquid, and weight equivalent; temperature reading and understanding Fahrenheit and Celsius; millimeter, centimeter, decimeter, meter, decameter, hectometer, and kilometer
- Understanding percentages; finding percents; percents and decimals; percents and fractions; discount and sales tax; fractions as percents

Fractions & Comparison

Least common multiples; adding and subtracting fractions with unlike denominators; adding and subtracting mixed numbers; renaming; multiplying and dividing fractions; multiplying and dividing two fractions; reducing

Equations, Colors, & Geometry

Shapes, solids and diagonals; symmetry; congruent and similar figures; congruent segments and angles

- Circles: diameter, radius, and chord
- Compass; protractor; types of triangles; classifying polygons
- Perimeter, area, volume, and surface area
- Addition, subtraction, multiplication, and division of equations

Graphs, Estimation, & Solving

Mean, mode, median, and calculator math

- Problem solving, logical reasoning, and choosing an operation
- Probability with one variable

Multiplication & Division

Multiplication terms, facts and properties; 3-digit times 3-digit numbers; exponents; missing factors; money by 2-digit number; multiplying by 10s, 100s, and 1,000's

- Division terms, facts, and properties; 3-digit quotients with remainders; averaging with remainders; dividing money; estimating quotients; zeros in the quotient

6th Grade

There are 160 lessons in this Horizon 6th Grade Math Program. They will be covered (approximately) according to the following schedule below. The content covered by lessons 1 – 160 is also noted below.

September: Lessons 1 – 13

October: Lessons 14 – 32

November: Lessons 33 – 49

December: Lessons 50 – 63

January: Lessons 64 – 80

February: Lessons 81 – 99

March: Lessons 100 – 118

April: Lessons 119 – 132

May: Lessons 133 – 149

June: Lessons 150 - 160

Numbers, Order, & Value

Word numbers through hundred trillion; scientific notation; base 2 numbers; order of operations; square roots

- Integers on a number line; opposite integers; comparing integers; adding integers; subtracting integers; multiplying integers; dividing integers
- Rounding to tenth, hundredth, and thousandth

Addition & Subtraction

Addition properties, terms, and facts; addition with 2, 3, 4, 5, and 6-digits; missing addends

- Subtraction properties, terms, and facts; subtraction with 2, 3, 4, 5, and 6-digits
- Adding and subtracting money
- Counting change
- Adding and subtracting equations

Ratios, Measurement, & Decimals

Standard and metric linear, liquid, and weight equivalent; temperature reading and understanding; Fahrenheit and Celsius; millimeter, centimeter, decimeter, meter, decameter, hectometer, and kilometer

- Word numbers to hundred thousandths; extend quotient to tenths, hundredths, thousandths; interpret the remainder; divide by a decimal; divide and multiply by 10, 100, 1,000; repeating decimals
- Write simple ratios; cross products; use cross products to solve for “n”; ratio as a percent; equal ratios

Fractions & Comparison

Simplify before you multiply reciprocals; divide a whole number by a fraction; round an estimate with fractions; divide a fraction by a whole number; divide by a mixed number

Equations, Colors, & Geometry

- Construct a perpendicular bisector; bisect an angle; construct a regular hexagon; construct an equilateral triangle; construct a right triangle; construct a square; construct a parallelogram
- Writing equations for word problems

Graphs, Estimation, & Solving

Mean, mode, and median; graphing in all four quadrants

- Choosing an operation; multiple step problems; draw a picture; find a pattern; use a chart, table, menu, and schedule
- Writing checks, budgeting, banking, savings, understanding interest; using charts and tables

Multiplication & Division

Multiplication properties, terms and facts; missing factors; exponents; 4-digit by 4-digit; 5-digit by 5-digit

- Division properties, terms, and facts; estimating quotients; averaging with remainders; 4-digit divisor