

Fifth Grade Mathematics SCOPE & SEQUENCE



1. NUMBER THEORY

word numbers through hundred billion
(review) expanded form through hundred
billion
(review) Roman numerals
divisibility
prime and composite
prime factorization
*factor trees (slight introduction before)
*exponents (slight introduction before)



2. PLACE VALUE

ones, tens, hundreds thousands, ten thousands, hundred thousands millions, ten millions, hundred millions billions, ten billions, hundred billions



3. NUMBER ORDER

*rounding to the nearest 10

*rounding to the nearest 100

*rounding to the nearest 1,000

*greater than and less than

*equal and not equal



4. ADDITION

*addition properties

*addition terms

*addition facts

*addition with two-, three-, four-, five-, and six-digit numbers

equations column addition missing addends

estimating adding money

more than one operation



5. SUBTRACTION

*subtraction properties

*subtraction terms

*basic facts

*subtraction with two-, three-, four-, five-, and six-digit numbers

equations

estimating

subtracting money

more than one operation



6. MULTIPLICATION

*multiplication terms

*multiplication facts

*multiplication properties

two-digit times two-digit numbers

triple-digit times a single digit numbers

*three-digit times three-digit numbers

multiplying by 10, 100, and 1000

money by two-digit number

missing factors

estimating products

*exponents



7. DIVISION

*division terms

*division facts

*division properties

one-digit dividend by one-digit divisor with remainders

two-digit dividend by one-digit divisor dividing money

zeros in the quotient

two-digit divisors that are multiples of ten two-digit divisors with one-digit quotients

two-digit divisors when the guess is incorrect two-digit divisors with two digit-quotients estimating quotients

*three-digit quotients with remainders

*averaging with remainders

^{*} new concepts



8. TIME

terms
AM, PM
century
time equivalents
elapsed time
calendar
time zones



9. MONEY

money will be covered under addition, subtraction, multiplication, and division counting change



10. GEOMETRY

shapes, solids and diagonals
symmetry
*congruent and similar figures
*congruent segments and angles
line, line segment, ray, endpoint, plane
parallel, intersecting, perpendicular lines
angles—rays, vertex, acute, obtuse, right
*circles: diameter, radius, and chord
*compass
*protractor
*types of triangles
*classifying polygons



11. PERIMETER, AREA, AND VOLUME

perimeter area volume *surface area



12. Fractions

equivalent fractions
greatest common factor
reducing fractions
comparing and ordering fractions
adding and subtracting fractions with
common denominators
mixed numbers
improper fractions

- *least common multiples
- *adding and subtracting fractions with unlike denominators
- *adding and subtracting mixed numbers without regrouping
- *renaming mixed numbers
- *adding mixed numbers, renaming fractions
- *more renaming
- *subtracting mixed numbers with common denominators—borrowing from whole numbers
- *subtracting mixed numbers with unlike denominators—borrowing from whole numbers
- *multiplying fractions with whole numbers
 *multiplying two fractions together
- *multiplying mixed numbers together
- *dividing whole numbers by fractions
- *dividing fractions by whole numbers
- *dividing fractions by fractions



13. DECIMALS

fractions to decimals

*word numbers to thousandths

*comparing decimals

*ordering decimals

add decimals (horizontally and vertically)

subtracting decimals

estimating decimals

estimating decimals with money

*multiplying decimals by whole numbers

*multiplying decimals by decimals

*dividing decimals by whole numbers



14. RATIO

writing simple ratios multiplying to find equal ratios dividing to find equal ratios *cross products



15. MEASUREMENT

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



16. GRAPHS

bar line pictographs circle coordinate graphs comparing graphs *mean, mode, median



17. EQUATIONS

addition subtraction multiplication division



18. PERCENT

*understanding the concept

*finding the percent of a number

*percent and decimals

*percent and fractions

*discount and sales tax

*fractions as percent



19. PROBLEM SOLVING

Four-step method understanding the question choosing an operation reasonable or unreasonable too much/too little information Guess and Check understanding remainders making organized lists working backwards
Make it Simpler logical reasoning drawing a picture



20. PROBABILITY

one variable



21. CALCULATOR MATH

problem solving with calculators

^{*} new concepts

^{*}new concepts