

READINESS STANDARDS - Grade 5 Math

(5.2) **Number, operation, and quantitative reasoning.** The student uses fractions in problem-solving situations. The student is expected to

(A) generate a fraction equivalent to a given fraction such as $\frac{1}{2}$ and $\frac{3}{6}$ or $\frac{4}{12}$ and $\frac{1}{3}$ Fraction, Equivalent, Generate

(C) compare two fractional quantities in problem-solving situations using a variety of methods, including common denominators Compare, Common denominator

(5.3) **Number, operation, and quantitative reasoning.** The student adds, subtracts, multiplies, and divides to solve meaningful problems. The student is expected to

(A) use addition and subtraction to solve problems involving whole numbers and decimals Add, Subtract, Decimal

(B) use multiplication to solve problems involving whole numbers (no more than three digits times two digits without technology) Multiply, Digit

(C) use division to solve problems involving whole numbers (no more than two-digit divisors and three-digit dividends without technology), including interpreting the remainder within a given context Divide, Divisor, Dividend, Remainder

(5.5) **Patterns, relationships, and algebraic thinking.** The student makes generalizations based on observed patterns and relationships. The student is expected to

(A) describe the relationship between sets of data in graphic organizers such as lists, tables, charts, and diagrams Data, Graphic organizer, List, Table, Chart, Diagram

(5.8) **Geometry and spatial reasoning.** The student models transformations. The student is expected to

(A) sketch the results of translations, rotations, and reflections on a Quadrant I coordinate grid Translation, Rotation, Reflection, Coordinate grid, Quadrant

(5.10) **Measurement.** The student applies measurement concepts involving length (including perimeter), area, capacity/volume, and weight/mass to solve problems. The student is expected to

(C) select and use appropriate units and formulas to measure length, perimeter, area, and volume Unit, Formula, Length, Perimeter, Area, Volume

(5.12) **Probability and statistics.** The student describes and predicts the results of a probability experiment. The student is expected to

(B) use experimental results to make predictions Result, Probability, Experiment

(5.13) **Probability and statistics.** The student solves problems by collecting, organizing, displaying, and interpreting sets of data. The student is expected to

(B) describe characteristics of data presented in tables and graphs including median, mode, and range Data, Graph, Table, Mean, Median, Mode

SUPPORTING STANDARDS - Grade 5 Math

(5.1) **Number, operation, and quantitative reasoning.** The student uses place value to represent whole numbers and decimals. The student is expected to

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| (A) use place value to read, write, compare, and order whole numbers through 999,999,999,999 | Compare, Order, One, Ten, Hundred, Thousand, Ten thousand, Hundred thousand, Million |
| (B) use place value to read, write, compare, and order decimals through the thousandths place | Compare, Order, Decimal, Tenths, Hundredths, Thousandths |

(5.2) **Number, operation, and quantitative reasoning.** The student uses fractions in problem-solving situations. The student is expected to

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| (B) generate a mixed number equivalent to a given improper fraction or generate an improper fraction equivalent to a given mixed number | Generate, Mixed number, Equivalent, Improper fraction |
| (D) use models to relate decimals to fractions that name tenths, hundredths, and thousandths | Relate, Decimal, Fraction, Tenths, Hundredths, Thousandths |

(5.3) **Number, operation, and quantitative reasoning.** The student adds, subtracts, multiplies, and divides to solve meaningful problems. The student is expected to

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| (D) identify common factors of a set of whole numbers | Common factor, Whole number |
| (E) model situations using addition and/or subtraction involving fractions with like denominators using [concrete objects,] pictures, words, and numbers | Add, Subtract, Fraction |

(5.4) **Number, operation, and quantitative reasoning.** The student estimates to determine reasonable results. The student is expected to

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| (A) use strategies, including rounding and compatible numbers to estimate solutions to addition, subtraction, multiplication, and division problems | Round, Compatible number, Estimate, Add, Subtract, Multiply, Divide |
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(5.5) **Patterns, relationships, and algebraic thinking.** The student makes generalizations based on observed patterns and relationships. The student is expected to

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| (B) identify prime and composite numbers using [concrete objects,] pictorial models, and patterns in factor pairs | Prime number, Composite number, Factor pair |
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(5.6) **Patterns, relationships, and algebraic thinking.** The student describes relationships mathematically. The student is expected to

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| (A) select from and use diagrams and equations such as $y = 5 + 3$ to represent meaningful problem situations | Diagram, Equation |
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(5.7) **Geometry and spatial reasoning.** The student generates geometric definitions using critical attributes. The student is expected to

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| (A) identify essential attributes including parallel, perpendicular, and congruent parts of two- and three-dimensional geometric figures | Attribute, Parallel, Perpendicular, Congruent, Two-dimensional, Three-dimensional |
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READINESS STANDARDS - Grade 5 Math

(5.8) **Geometry and spatial reasoning.** The student models transformations. The student is expected to

(B) identify the transformation that generates one figure from the other when given two congruent figures on a Quadrant I coordinate grid

Transformation, Figure, Quadrant, Coordinate grid

(5.9) **Geometry and spatial reasoning.** The student recognizes the connection between ordered pairs of numbers and locations of points on a plane. The student is expected to

(A) locate and name points on a coordinate grid using ordered pairs of whole numbers

Point, Coordinate grid, Ordered pair

(5.10) **Measurement.** The student applies measurement concepts involving length (including perimeter), area, capacity/volume, and weight/mass to solve problems. The student is expected to

(A) perform simple conversions within the same measurement system (SI (metric) or customary)

Convert, Measurement system

(B) connect models for perimeter, area, and volume with their respective formulas

Perimeter, Area, Volume, Formula

(5.11) **Measurement.** The student applies measurement concepts. The student measures time and temperature (in degrees Fahrenheit and Celsius). The student is expected to

(A) solve problems involving changes in temperature

Temperature, Cooler, Hotter, Increase, Decrease

(B) solve problems involving elapsed time

Elapsed, Later, Earlier, Before, Later

(5.12) **Probability and statistics.** The student describes and predicts the results of a probability experiment. The student is expected to

(A) use fractions to describe the results of an experiment

Fraction, Experiment, Test

(C) list all possible outcomes of a probability experiment such as tossing a coin

Outcome, Probability, Experiment

(5.13) **Probability and statistics.** The student solves problems by collecting, organizing, displaying, and interpreting sets of data. The student is expected to

(A) use tables of related number pairs to make line graphs

Table, Related number pair, Line graph

(C) graph a given set of data using an appropriate graphical representation such as a picture or line graph

Graph, Data, Picture graph, Line graph