**Measurement and Data (181 - 190)**

**Geometric Measuring and Problem Solving**

* Angle Measurement
  + Compares angle measures to benchmark angles
  + Measures angles using a protractor
  + Solves one‑step word problems involving angles
* Area
  + Determines areas of figures composed of whole unit squares
* Conversion of Units
  + Completes complex conversions of more than two units of time
  + Completes simple conversions of customary units of length
  + Completes simple conversions of units of time
* Length
  + Completes simple conversions of customary units of length
  + Knows the appropriate customary unit or tool to measure length
  + Understands that the measurement of an object will change depending upon the units used to measure it
* Money
  + Determines equivalent coin values
  + Determines the decimal value of a collection of coins and/or bills by counting on
  + Determines the whole number value of a collection of coins given as coin names
  + Determines the whole number value of a collection of coins given as pictures
  + Solves money word problems involving coins
* Perimeter/Circumference
  + Determines perimeters of basic polygons with all sides labeled
* Problem Solving with Units
  + Solves elapsed‑time word problems across either minutes or hours
  + Solves money word problems involving coins
  + Solves multi‑step money word problems involving whole numbers
  + Solves one‑step capacity word problems involving whole number multiplication or division
  + Solves one‑step length word problems involving addition or subtraction
  + Solves one‑step money word problems involving whole number addition or subtraction
  + Solves one‑step money word problems involving whole number multiplication or division
* Time
  + Completes complex conversions of more than two units of time
  + Completes simple conversions of units of time
  + Determines elapsed time across either minutes or hours using clocks
  + Reads analog clocks to the nearest five minutes
  + Reads analog clocks to the nearest half hour
  + Reads analog clocks to the nearest minute
  + Solves elapsed‑time word problems across either minutes or hours
  + Understands A.M. and P.M.
  + Understands time interval concepts: quarter to, half past, etc.

**Represent and Interpret Data**

* Data Analysis
  + Adds and subtracts to answer questions about bar graphs with multi‑unit scales
  + Adds and subtracts to answer questions about bar graphs with single‑unit scales
  + Adds and subtracts to answer questions about pictographs with single‑unit scales
  + Compares categories in bar graphs with multi‑unit scales
  + Compares categories in bar graphs with single‑unit scales
  + Compares categories in pictographs with single‑unit scales
  + Counts sets of objects by category
  + Reads bar graphs with multi‑unit scales to determine how many in a category
  + Reads bar graphs with single‑unit scales to determine how many in a category
  + Reads data in tables or charts
  + Reads pictographs with multi‑unit scales to determine how many in a category
* Data Representation
  + Represents data in bar graphs with multi‑unit scales
  + Represents data in bar graphs with single‑unit scales
  + Represents data in pictographs with single‑unit scales
  + Represents data in picture graphs with single‑unit scales
  + Represents data in tables or charts

**Measurement and Data (191 - 200)**

**Geometric Measuring and Problem Solving**

* Angle Measurement
  + Identifies/estimates angle measures
  + Measures angles using a protractor
  + Compares angle measures to benchmark angles
* Time
  + Reads analog clocks to the nearest five minutes
  + Reads analog clocks to the nearest minute
  + Solves elapsed-time word problems across both minutes and hours
  + Solves elapsed-time word problems across either minutes or hours
  + Understands time interval concepts: quarter to, half past, etc.
  + Completes complex conversions of more than two units of time
  + Completes simple conversions of units of time
  + Determines elapsed time across both minutes and hours using clocks
  + Determines elapsed time across either minutes or hours using clocks
* Money
  + Solves money word problems involving coins
  + Solves multi-step money word problems involving coins and decimals
  + Determines the decimal value of a collection of coins and/or bills by counting on
  + Determines the whole number value of a collection of coins given as coin names
* Length
  + Knows the appropriate customary unit or tool to measure length
  + Measures length, width, or height in nonstandard units
  + Completes simple conversions of customary units of length
* Capacity
  + Completes simple conversions of customary units of capacity
* Weight/Mass
  + Completes simple conversions of customary units of weight
* Conversion of Units
  + Completes complex conversions of more than two units of time
  + Completes simple conversions of customary units of capacity
  + Completes simple conversions of customary units of length
  + Completes simple conversions of customary units of weight
  + Completes simple conversions of units of time
* Perimeter/Circumference
  + Solves real-world and mathematical problems involving perimeters of rectangles
  + Determines perimeters of basic polygons in which not all sides are labeled
  + Determines perimeters of basic polygons with all sides labeled
* Area
  + Determines areas of figures composed of whole unit squares
  + Determines areas of rectangles with whole number sides, given the formula
  + Estimates areas of figures using square units
* Problem Solving with Units
  + Solves elapsed-time word problems across both minutes and hours
  + Solves elapsed-time word problems across either minutes or hours
  + Solves money word problems involving coins
  + Solves multi-step money word problems involving coins and decimals
  + Solves multi-step money word problems involving whole numbers
  + Solves one-step capacity word problems involving whole number multiplication or division
  + Solves one-step length word problems involving addition or subtraction
  + Solves one-step money word problems involving whole number addition or subtraction
  + Solves one-step money word problems involving whole number multiplication or division
  + Solves one-step weight/mass word problems involving whole number multiplication and division
  + Solves real-world and mathematical problems involving perimeters of rectangles

**Represent and Interpret Data**

* Data Representation
  + Represents data in bar graphs with multi-unit scales
  + Represents data in bar graphs with single-unit scales
  + Represents data in line or dot plots with whole number scales
  + Represents data in pictographs with multi-unit scales
  + Represents data in pictographs with single-unit scales
  + Represents data in picture graphs with multi-unit scales
  + Represents data in tables or charts
* Data Analysis
  + Answers multi-step questions about bar graphs with single-unit scales
  + Reads bar graphs with multi-unit scales to determine how many in a category
  + Reads pictographs with multi-unit scales to determine how many in a category
  + Adds and subtracts to answer questions about bar graphs with multi-unit scales
  + Adds and subtracts to answer questions about bar graphs with single-unit scales
  + Adds and subtracts to answer questions about pictographs with multi-unit scales
  + Adds and subtracts to answer questions about pictographs with single-unit scales
  + Compares categories in bar graphs with multi-unit scales
  + Compares categories in bar graphs with single-unit scales
  + Compares categories in pictographs with single-unit scales

**Measurement and Data (201 – 210)**

**Geometric Measuring and Problem Solving**

* Decimals: Represent and Solve Word Problems
  + Solves one-step word problems involving addition and subtraction of decimals with a different number of digits after the decimal point
* Rates/Ratios/Proportions/Percents
  + Calculates unit rates
  + Uses a given unit rate to solve a one-step real-world problem
* Angle Measurement
  + Identifies/estimates angle measures
  + Measures angles using a protractor
  + Compares angle measures to benchmark angles
* Time
  + Reads analog clocks to the nearest five minutes
  + Reads analog clocks to the nearest minute
  + Solves elapsed-time word problems across both minutes and hours
  + Solves elapsed-time word problems across either minutes or hours
  + Solves multi-step time word problems involving conversion across seconds, minutes, hours, etc.
  + Understands time interval concepts: quarter to, half past, etc.
  + Completes complex conversions of more than two units of time
  + Completes simple conversions of units of time
  + Determines elapsed time across both minutes and hours using clocks
  + Determines elapsed time across either minutes or hours using clocks
* Money
  + Solves money word problems involving coins
  + Solves multi-step money word problems involving coins and decimals
* Length
  + Knows the appropriate metric unit or tool to measure length
  + Solves multi-step length word problems involving whole numbers and conversion of customary units
  + Understands measurement involving rulers
  + Completes complex conversions of customary units of length involving fractions, decimals, or more than two units
  + Completes simple conversions of customary units of length
* Capacity
  + Knows relative sizes of metric units of capacity
  + Completes simple conversions of customary units of capacity
* Weight/Mass
  + Completes simple conversions of customary units of weight
  + Estimates the mass of objects in customary units
  + Estimates the mass of objects in metric units
* Conversion of Units
  + Solves multi-step length word problems involving whole numbers and conversion of customary units
  + Solves multi-step time word problems involving conversion across seconds, minutes, hours, etc.
  + Completes complex conversions of customary units of length involving fractions, decimals, or more than two units
  + Completes complex conversions of more than two units of time
  + Completes simple conversions of customary units of capacity
  + Completes simple conversions of customary units of length
  + Completes simple conversions of customary units of weight
  + Completes simple conversions of units of time
* Perimeter/Circumference
  + Solves real-world and mathematical problems involving perimeters of rectangles
  + Determines perimeters of basic polygons in which not all sides are labeled
  + Determines side lengths given the perimeter of rectangles
* Area
  + Solves real-world and mathematical problems involving areas of rectangles
  + Understands the concept of area
  + Determines areas of figures composed of whole and partial unit squares
  + Determines areas of rectangles with whole number sides, given the formula
  + Determines areas of rectangles with whole-number sides
  + Estimates areas of figures using square units
* Volume
  + Solves problems involving rectangular prisms composed of unit cubes
  + Determines volumes of figures by counting unit cubes
* Problem Solving with Units
  + Solves elapsed-time word problems across both minutes and hours
  + Solves elapsed-time word problems across either minutes or hours
  + Solves money word problems involving coins
  + Solves multi-step length word problems involving whole numbers and conversion of customary units
  + Solves multi-step money word problems involving coins and decimals
  + Solves multi-step money word problems involving whole numbers
  + Solves multi-step time word problems involving conversion across seconds, minutes, hours, etc.
  + Solves one-step capacity word problems involving whole number multiplication or division
  + Solves one-step money word problems involving whole number addition or subtraction
  + Solves one-step time word problems involving addition or subtraction
  + Solves one-step time word problems involving multiplication or division
  + Solves one-step weight/mass word problems involving whole number addition and subtraction
  + Solves problems involving rectangular prisms composed of unit cubes
  + Solves real-world and mathematical problems involving areas of rectangles
  + Solves real-world and mathematical problems involving perimeters of rectangles

**Represent and Interpret Data**

* Data Representation
  + Represents data in bar graphs with multi-unit scales
  + Represents data in bar graphs with single-unit scales
  + Represents data in line or dot plots with whole number scales
  + Represents data in pictographs with multi-unit scales
  + Represents data in picture graphs with multi-unit scales
* Data Analysis
  + Answers multi-step questions about bar graphs with single-unit scales
  + Reads pictographs with multi-unit scales to determine how many in a category
  + Adds and subtracts to answer questions about bar graphs with multi-unit scales
  + Adds and subtracts to answer questions about bar graphs with single-unit scales
  + Adds and subtracts to answer questions about pictographs with multi-unit scales

**Measurement and Data (211 - 220)**

**Geometric Measuring and Problem Solving**

* Decimals: Represent and Solve Word Problems
  + Solves one-step word problems involving addition and subtraction of decimals with a different number of digits after the decimal point
* Rates/Ratios/Proportions/Percents
  + Calculates unit rates
  + Uses a given unit rate to solve a one-step real-world problem
* Angle Measurement
  + Identifies/estimates angle measures
  + Measures angles using a protractor
  + Compares angle measures to benchmark angles
* Time
  + Solves elapsed-time word problems across both minutes and hours
  + Solves elapsed-time word problems across either minutes or hours
  + Solves multi-step time word problems involving conversion across seconds, minutes, hours, etc.
  + Completes complex conversions of more than two units of time
  + Completes simple conversions of units of time
  + Determines elapsed time across both minutes and hours using clocks
* Money
  + Solves multi-step money word problems involving coins and decimals
* Length
  + Knows the appropriate metric unit or tool to measure length
  + Solves multi-step length word problems involving decimals or fractions and conversion of customary units
  + Solves multi-step length word problems involving whole numbers and conversion of customary units
  + Completes complex conversions of customary units of length involving fractions, decimals, or more than two units
  + Completes simple conversions of customary units of length
* Capacity
  + Measures the capacity of objects in metric units
  + Solves multi-step capacity word problems involving whole numbers and conversion of customary units
  + Completes complex conversions of customary units of capacity involving fractions, decimals, or more than two units
  + Completes simple conversions of customary units of capacity
  + Estimates the capacity of objects in metric units
* Weight/Mass
  + Completes conversions of metric units of mass
  + Completes simple conversions of customary units of weight
* Conversion of Units
  + Solves multi-step capacity word problems involving whole numbers and conversion of customary units
  + Solves multi-step length word problems involving decimals or fractions and conversion of customary units
  + Solves multi-step length word problems involving whole numbers and conversion of customary units
  + Solves multi-step time word problems involving conversion across seconds, minutes, hours, etc.
  + Completes complex conversions of customary units of capacity involving fractions, decimals, or more than two units
  + Completes complex conversions of customary units of length involving fractions, decimals, or more than two units
  + Completes complex conversions of more than two units of time
  + Completes conversions of metric units of mass
  + Completes simple conversions of customary units of capacity
  + Completes simple conversions of customary units of length
  + Completes simple conversions of customary units of weight
  + Completes simple conversions of units of time
* Perimeter/Circumference
  + Solves real-world and mathematical problems involving perimeters of rectangles
  + Counts to find perimeters of complex figures
  + Describes the effect on perimeter when dimensions of a polygon are changed
  + Determines perimeters of basic polygons in which not all sides are labeled
  + Determines side lengths given the perimeter of rectangles
* Area
  + Solves real-world and mathematical problems involving areas of rectangles
  + Understands the concept of area
  + Determines areas of figures composed of whole and partial unit squares
  + Determines areas of rectangles with whole number sides, given the formula
  + Determines areas of rectangles with whole-number sides
* Volume
  + Solves problems involving rectangular prisms composed of unit cubes
  + Determines volumes of figures by counting unit cubes
  + Determines volumes of rectangular prisms
* Problem Solving with Units
  + Solves elapsed-time word problems across both minutes and hours
  + Solves elapsed-time word problems across either minutes or hours
  + Solves multi-step capacity word problems involving whole numbers and conversion of customary units
  + Solves multi-step length word problems involving decimals or fractions and conversion of customary units
  + Solves multi-step length word problems involving whole numbers
  + Solves multi-step length word problems involving whole numbers and conversion of customary units
  + Solves multi-step money word problems involving coins and decimals
  + Solves multi-step money word problems involving whole numbers
  + Solves multi-step temperature word problems involving whole numbers
  + Solves multi-step time word problems involving conversion across seconds, minutes, hours, etc.
  + Solves one-step capacity word problems involving whole number multiplication or division
  + Solves problems involving rectangular prisms composed of unit cubes
  + Solves real-world and mathematical problems involving areas of rectangles
  + Solves real-world and mathematical problems involving perimeters of rectangles

**Represent and Interpret Data**

* Data Representation
  + Represents data in line or dot plots with fractional scales
  + Represents data in line or dot plots with whole number scales
* Data Analysis
  + Adds and subtracts to answer questions about bar graphs with multi-unit scales
  + Adds and subtracts to answer questions about pictographs with multi-unit scales

**Measurement and Data (221 - 230)**

**Angle Measurement**

Knows the definition of an angle

Measures angles using a protractor

**Time**

Solves elapsed-time word problems across both minutes and hours

Solves elapsed-time word problems across either minutes or hours

Solves multi-step time word problems involving conversion across seconds, minutes, hours, etc.

Completes complex conversions of more than two units of time

**Money**

Solves multi-step money word problems involving coins and decimals

Compares whole number money amounts given coin and bill names

**Length**

Solves multi-step length word problems involving decimals or fractions and conversion of customary units

Solves multi-step length word problems involving whole numbers and conversion of customary units

Completes complex conversions of customary units of length involving fractions, decimals, or more than two units

Completes conversions of metric units of length

Completes simple conversions of customary units of length

**Capacity**

Completes complex conversions of customary units of capacity involving fractions, decimals, or more than two units

Completes conversions of metric units of capacity

Completes simple conversions of customary units of capacity

**Weight/Mass**

Completes complex conversions of customary units of weight involving fractions, decimals, or more than two units

Completes conversions of metric units of mass

Completes simple conversions of customary units of weight

**Conversion of Units**

Solves multi-step length word problems involving decimals or fractions and conversion of customary units

Solves multi-step length word problems involving whole numbers and conversion of customary units

Solves multi-step time word problems involving conversion across seconds, minutes, hours, etc.

Completes complex conversions of customary units of capacity involving fractions, decimals, or more than two units

Completes complex conversions of customary units of length involving fractions, decimals, or more than two units

Completes complex conversions of customary units of weight involving fractions, decimals, or more than two units

Completes complex conversions of more than two units of time

Completes conversions of metric units of capacity

Completes conversions of metric units of length

Completes conversions of metric units of mass

Completes simple conversions of customary units of capacity

Completes simple conversions of customary units of length

Completes simple conversions of customary units of weight

**Perimeter/Circumference**

Solves real-world and mathematical problems involving both area and perimeter of rectangles

Solves real-world and mathematical problems involving perimeters of rectangles

Determines perimeters of basic polygons in which not all sides are labeled

Determines perimeters of complex figures in which not all sides are labeled

Determines side lengths given the perimeter of rectangles

**Area**

Solves real-world and mathematical problems involving areas of figures composed of polygons

Solves real-world and mathematical problems involving areas of rectangles

Solves real-world and mathematical problems involving both area and perimeter of rectangles

Determines areas of rectangles with whole-number sides

Determines side lengths given the area of rectangles

**Volume**

Solves real-world and mathematical problems involving volumes of rectangular prisms

Determines the length, width, or height given the volume of a rectangular prism and two of the dimensions

Determines volumes of figures by counting unit cubes

Determines volumes of rectangular prisms

**Problem Solving with Units**

Solves elapsed-time word problems across both minutes and hours

Solves elapsed-time word problems across either minutes or hours

Solves multi-step length word problems involving decimals or fractions and conversion of customary units

Solves multi-step length word problems involving whole numbers and conversion of customary units

Solves multi-step money word problems involving coins and decimals

Solves multi-step money word problems involving whole numbers

Solves multi-step time word problems involving conversion across seconds, minutes, hours, etc.

Solves real-world and mathematical problems involving areas of figures composed of polygons

Solves real-world and mathematical problems involving areas of rectangles

Solves real-world and mathematical problems involving both area and perimeter of rectangles

Solves real-world and mathematical problems involving perimeters of rectangles

Solves real-world and mathematical problems involving volumes of rectangular prisms

**Fractions: Represent and Solve Word Problems**

Solves multi-step word problems involving data from a line plot or dot plot with a fractional scale

**Data Analysis**

Solves multi-step word problems involving data from a line plot or dot plot with a fractional scale