**Operations and Algebraic Thinking (181 - 190)**

**Represent and Solve Problems**

* Number Sentences/Equations/Equivalence
  + Decomposes whole numbers within 10 in more than one way
  + Determines start or change unknown in subtraction equations with whole numbers within 20
  + Determines unknown factors in multiplication equations with whole numbers and products within 100
  + Determines unknown parts in addition equations with whole numbers, sums within 20
  + Represents division equations with whole numbers as part‑unknown multiplication equations
  + Represents subtraction equations with whole numbers as part‑unknown addition equations
* Numerical Expressions
  + Evaluates numerical expressions involving addition and subtraction with whole numbers and parentheses
* Properties and Relationships of Operations
  + Identifies the missing equation in whole‑number addition or subtraction fact families
  + Represents division equations with whole numbers as part‑unknown multiplication equations
  + Represents multiplication as repeated addition
  + Represents subtraction equations with whole numbers as part‑unknown addition equations
  + Understands the inverse relationship between addition and subtraction
* Whole Numbers and Decimals: Rounding/Estimation
  + Estimates solutions to multi‑step word problems involving the four operations with whole numbers
* Whole Numbers: Addition/Subtraction
  + Adds three or more whole numbers with sums within 20
* Whole Numbers: Concepts/Properties
  + Determines if sets of objects are even or odd
* Whole Numbers: Multiplication/Division
  + Divides basic facts
  + Multiplies basic facts
  + Represents multiplication using models
* Whole Numbers: Place Value
  + Decomposes numbers to make 10 as a strategy for addition or subtraction
* Whole Numbers: Represent and Solve Word Problems
  + Estimates solutions to multi‑step word problems involving the four operations with whole numbers
  + Represents multi‑step word problems with expressions or equations, whole numbers
  + Represents one‑step addition and subtraction word problems with expressions or equations, whole numbers within 20
  + Represents one‑step equal‑groups multiplication and division word problems with models, whole numbers
  + Represents one‑step equal‑groups multiplication word problems as expressions or equations, whole numbers
  + Represents one‑step multiplicative‑comparison word problems as expressions or equations, whole numbers
  + Solves multi‑step addition and subtraction word problems, whole numbers within 100
  + Solves multi‑step word problems involving the four operations with whole numbers
  + Solves one‑step additive‑comparison word problems, whole numbers within 100
  + Solves one‑step additive‑comparison word problems, whole numbers within 20
  + Solves one‑step equal‑groups division word problems, whole numbers within 100
  + Solves one‑step equal‑groups multiplication word problems, whole numbers with products within 100
  + Solves one‑step put‑together word problems with result unknown, whole numbers within 100
  + Solves one‑step put‑together word problems with result unknown, whole numbers within 20
  + Solves one‑step put‑together word problems with start, change, or part unknown, whole numbers within 100
  + Solves one‑step put‑together word problems with start, change, or part unknown, whole numbers within 20
  + Solves one‑step take‑apart word problems with result unknown, whole numbers within 100
  + Solves one‑step take‑apart word problems with result unknown, whole numbers within 20
  + Solves one‑step take‑apart word problems with start, change, or part unknown, whole numbers within 100
  + Solves one‑step take‑apart word problems with start, change, or part unknown, whole numbers within 20
  + Solves put‑together word problems involving three addends, whole numbers within 20

**Operations and Algebraic Thinking (191 - 200)**

**Represent and Solve Problems**

* Whole Numbers: Place Value
  + Decomposes numbers to make 10 as a strategy for addition or subtraction
* Whole Numbers: Multiplication/Division
  + Multiplies basic facts
  + Divides basic facts
* Whole Numbers: Represent and Solve Word Problems
  + Represents multi-step word problems with expressions or equations, whole numbers
  + Represents one-step addition and subtraction word problems with expressions or equations, whole numbers within 100
  + Represents one-step addition and subtraction word problems with expressions or equations, whole numbers within 20
  + Represents one-step equal-groups multiplication word problems as expressions or equations, whole numbers
  + Represents one-step multiplicative-comparison word problems as expressions or equations, whole numbers
  + Solves multi-step addition and subtraction word problems, whole numbers within 100
  + Solves multi-step word problems involving the four operations with whole numbers
  + Solves one-step additive-comparison word problems, whole numbers within 100
  + Solves one-step additive-comparison word problems, whole numbers within 20
  + Solves one-step equal-groups division word problems, whole numbers within 100
  + Solves one-step equal-groups multiplication word problems, whole numbers with products within 100
  + Solves one-step multiplicative-comparison word problems, whole numbers products within 100
  + Solves one-step put-together word problems with result unknown, whole numbers within 100
  + Solves one-step put-together word problems with result unknown, whole numbers within 20
  + Solves one-step put-together word problems with start, change, or part unknown, whole numbers within 100
  + Solves one-step put-together word problems with start, change, or part unknown, whole numbers within 20
  + Solves one-step take-apart word problems with start, change, or part unknown, whole numbers within 100
  + Solves one-step take-apart word problems with start, change, or part unknown, whole numbers within 20
  + Solves put-together word problems involving three addends, whole numbers within 20
  + Estimates solutions to multi-step word problems involving the four operations with whole numbers
* Whole Numbers: Concepts/Properties
  + Determines if sets of objects are even or odd
* Whole Numbers and Decimals: Rounding/Estimation
  + Estimates solutions to multi-step word problems involving the four operations with whole numbers
  + Estimates solutions to one-step word problems involving the four operations with whole numbers
* Properties and Relationships of Operations
  + Applies the associative property of multiplication to whole numbers
  + Represents division equations with whole numbers as part-unknown multiplication equations
  + Represents multiplication as repeated addition
  + Represents subtraction equations with whole numbers as part-unknown addition equations
  + Understands multiplication as a comparison of sizes
  + Understands multiplication as many groups of equal size
  + Understands the inverse relationship between addition and subtraction
  + Understands the inverse relationship between multiplication and division
* Numerical Expressions
  + Evaluates numerical expressions involving addition and subtraction with whole numbers and parentheses
  + Evaluates numerical expressions involving multiple operations with whole numbers and parentheses
* Number Sentences/Equations/Equivalence
  + Represents division equations with whole numbers as part-unknown multiplication equations
  + Represents subtraction equations with whole numbers as part-unknown addition equations
  + Determines unknown divisors in division equations with whole numbers and dividends within 100
  + Determines unknown factors in multiplication equations with whole numbers and products within 100

**Analyze Patterns and Relationships**

* Whole Numbers: Concepts/Properties
  + Identifies prime and composite numbers
  + Identifies factors of numbers less than 100
* Patterns/Sequences/Series
  + Recognizes skip-counting patterns in 100s charts
  + Creates or extends shape patterns when given a rule

**Operations and Algebraic Thinking (201 - 210)**

**Represent and Solve Problems**

* Whole Numbers: Multiplication/Division
  + Divides basic facts
* Whole Numbers: Represent and Solve Word Problems
  + Represents multi-step word problems with expressions or equations, whole numbers
  + Represents one-step addition and subtraction word problems with expressions or equations, whole numbers within 100
  + Represents one-step addition and subtraction word problems with expressions or equations, whole numbers within 20
  + Represents one-step equal-groups division word problems as expressions or equations, whole numbers
  + Represents one-step equal-groups multiplication word problems as expressions or equations, whole numbers
  + Represents one-step multiplicative-comparison word problems as expressions or equations, whole numbers
  + Solves multi-step addition and subtraction word problems, whole numbers greater than 100
  + Solves multi-step addition and subtraction word problems, whole numbers within 100
  + Solves multi-step word problems involving the four operations with whole numbers
  + Solves one-step additive-comparison word problems, whole numbers within 100
  + Solves one-step division word problems that require interpretation of remainders, whole numbers
  + Solves one-step equal-groups division word problems, whole numbers within 100
  + Solves one-step multiplication word problems with multi-digit whole numbers
  + Solves one-step multiplicative-comparison word problems, whole numbers products within 100
  + Solves one-step put-together word problems with result unknown, whole numbers within 20
  + Solves one-step take-apart word problems with start, change, or part unknown, whole numbers within 100
  + Estimates solutions to multi-step word problems involving the four operations with whole numbers
* Whole Numbers and Decimals: Rounding/Estimation
  + Estimates solutions to multi-step word problems involving the four operations with whole numbers
  + Estimates solutions to one-step word problems involving the four operations with whole numbers
* Properties and Relationships of Operations
  + Applies the associative property of multiplication to whole numbers
  + Applies the distributive property of multiplication to whole numbers
  + Represents division equations with whole numbers as part-unknown multiplication equations
  + Represents multiplication as repeated addition
  + Represents subtraction equations with whole numbers as part-unknown addition equations
  + Understands division as equal sharing
  + Understands multiplication as a comparison of sizes
  + Understands multiplication as many groups of equal size
  + Understands the inverse relationship between addition and subtraction
  + Understands the inverse relationship between multiplication and division
* Numerical Expressions
  + Represents descriptions of calculations with numerical expressions that include parentheses
  + Evaluates numerical expressions involving multiple operations with whole numbers and parentheses
* Number Sentences/Equations/Equivalence
  + Represents division equations with whole numbers as part-unknown multiplication equations
  + Represents subtraction equations with whole numbers as part-unknown addition equations
  + Determines unknown divisors in division equations with whole numbers and dividends within 100
  + Determines unknown factors in multiplication equations with whole numbers and products greater than 100
  + Determines unknown factors in multiplication equations with whole numbers and products within 100

**Analyze Patterns and Relationships**

* Whole Numbers: Concepts/Properties
  + Identifies prime and composite numbers
  + Identifies factors of numbers less than 100
  + Identifies multiples of single-digit numbers
* Patterns/Sequences/Series
  + Recognizes skip-counting patterns in 100s charts

Creates or extends number patterns when given a rule

**Operations and Algebraic Thinking (211 - 220)**

**Represent and Solve Problems**

* Whole Numbers: Represent and Solve Word Problems
  + Represents multi-step word problems with expressions or equations, whole numbers
  + Represents one-step addition and subtraction word problems with expressions or equations, whole numbers within 100
  + Represents one-step equal-groups multiplication word problems as expressions or equations, whole numbers
  + Solves multi-step addition and subtraction word problems, whole numbers greater than 100
  + Solves multi-step addition and subtraction word problems, whole numbers within 100
  + Solves multi-step word problems involving the four operations with whole numbers
  + Solves one-step additive-comparison word problems, whole numbers within 100
  + Solves one-step division word problems that require interpretation of remainders, whole numbers
  + Solves one-step equal-groups division word problems, whole numbers within 100
  + Solves one-step multiplicative-comparison word problems, whole numbers products within 100
  + Estimates solutions to multi-step word problems involving the four operations with whole numbers
* Whole Numbers and Decimals: Rounding/Estimation
  + Estimates solutions to multi-step word problems involving the four operations with whole numbers
  + Estimates solutions to one-step word problems involving the four operations with whole numbers
* Rates/Ratios/Proportions/Percents
  + Uses a given unit rate to solve a multi-step real-world problem
* Properties and Relationships of Operations
  + Applies the distributive property of multiplication to whole numbers
  + Understands division as equal sharing
  + Understands multiplication as a comparison of sizes
  + Understands multiplication as many groups of equal size
  + Understands the inverse relationship between addition and subtraction
* Numerical Expressions
  + Represents descriptions of calculations with numerical expressions that include parentheses
  + Evaluates numerical expressions involving multiple operations with whole numbers and parentheses
* Number Sentences/Equations/Equivalence
  + Determines unknown factors in multiplication equations with whole numbers and products greater than 100

**Analyze Patterns and Relationships**

* Whole Numbers: Concepts/Properties
  + Identifies prime and composite numbers
  + Identifies factors of numbers less than 100
* Patterns/Sequences/Series
  + Recognizes skip-counting patterns in 100s charts
  + Creates or extends number patterns when given a rule

**Operations and Algebraic Thinking (221 - 230)**

**Whole Numbers: Represent and Solve Word Problems**

* Represents multi-step word problems with expressions or equations, whole numbers
* Represents one-step addition and subtraction word problems with expressions or equations, whole numbers within 100
* Solves multi-step addition and subtraction word problems, whole numbers greater than 100
* Solves multi-step word problems involving the four operations with whole numbers
* Solves one-step division word problems that require interpretation of remainders, whole numbers
* Estimates solutions to multi-step word problems involving the four operations with whole numbers

**Whole Numbers and Decimals: Rounding/Estimation**

* Estimates solutions to multi-step word problems involving the four operations with whole numbers

**Properties and Relationships of Operations**

* Applies the distributive property of multiplication to whole numbers
* Understands division as equal sharing
* Understands the inverse relationship between addition and subtraction

**Numerical Expressions**

* Represents descriptions of calculations with numerical expressions that include parentheses
* Evaluates numerical expressions involving multiple operations with whole numbers and parentheses

**Whole Numbers: Concepts/Properties**

* Identifies prime and composite numbers
* Identifies factors of numbers less than 100

**Patterns/Sequences/Series**

* Creates or extends number patterns when given a rule