UINTAH SCHOOL DISTRICT POWER STANDARDS

(With approximate alignment to Yearly Progress Pro Clusters)

Kindergarten Power Standards

Understand and demonstrate knowledge of kindergarten Utah State Core math language and symbols

1. Recognize, compare, and order numbers 0 to 20
2. Understand number concepts (0-20)
3. Write numbers to 20 (in and out of sequence)
4. Count to 30

First Grade Power Standards

Understand and demonstrate knowledge of first grade Utah State Core math language and symbols

1. Identify and use place value of ones & tens
2. Count, read, and write to 100
3. Addition facts to 20
4. Write and understand addition and subtraction story problems
5. Identify and add the same coins (nickel + nickel = 10)
6. Tell time to hour and half hour

Second Grade Power Standards

Understand and demonstrate knowledge of second grade Utah State Core math language and symbols

1. Recognize, compare, order, and write numbers to 1000.
   - C1-S1 Word names to 100
   - C1-S8 Recognize and compare pictorial models to 999
   - C1-S9 Identify numbers through 999
   - C1-S11 Compare and order whole numbers to 100 using terms least/greatest
2. Identify place and value of a given digit in a three-digit numeral.
   - C1-S5 Place value through hundreds
   - C1-S6 Group objects: 1s, 10s
   - C1-S7 Expanded form through 999
3. Memorize addition and subtraction facts to 20.
   - C9-S4 Addition facts (sums to 18)
   - C10 –S2 Subtraction facts (minuends to 18)
4. Add and subtract two and three digit numbers with/without regrouping.
   - C9-S5 2-digit addition without regrouping
   - C9-S3 3-digit addition without regrouping: Level 1
   - C10-S1 2-digit subtraction without regrouping
   - C10-S3 3-digit subtraction without regrouping: Level 1
5. Identify and use correct units of measurement (length, weight, capacity, time, money).
   - C5-S1 Measure length: Level 2
   - C5-S2 Estimate length/ weight/ capacity: Level 1
   - C5-S3 Compare capacity
   - C5-S4 Measure pounds
   - C5-S5 Customary linear unit equivalences

- C5-S6 Time to 15 minutes
- C5-S7 Basic concepts of time
- C6-S1 Value of up to 5 like coins to 99 cents
- C6-S2 Value of up to 5 coins to 99 cents

6. Interpret/read information from tables, graphs, and tally marks.
   - C3-S1 Tally charts and tables
   - C3-S2 Bar graphs: Level 2
   - C3-S3 Pictographs: Level 2
   - C3-S4 Representation of data: Level
7. Use unit fractions to identify parts of the whole and parts of the set.
   - C8-S1Fractional parts representation: Level 1
   - C8-S2 Model division of squares and rectangles into 3 equal parts
   - C8-S3 Model division of sets into 2,3,4 equal parts
   - C8-S4 Model division of regions into 2,3,4 equal parts

Third Grade Power Standards

Understand and demonstrate knowledge of third grade Utah State Core math language and symbols

1. Read, write, represent and compare whole numbers and basic fractions.
   - C1-S1 Compare/order numbers through 9,999
   - C1-S2 Compare expressions
   - C1-S3 Expanded form through thousands
   - C1-S6 Round to 10, 100, 1,000
   - C1-S7 Number lines: Level 2
   - C1-S8 Place value through thousands
   - C1-S9 Compare the relative size of numbers: Level 1
   - C1-S11 Demonstrate multiple ways to represent numbers: Level 1
   - C1-S12 Equivalent expressions: Level 1
   - C1-S14 Identify numbers through 9,999
   - C7-S1 Model division of regions into 2,3,4 equal parts
   - C7-S2 Models to compare/order fractions
   - C7-S3 Fractional parts representation: Level 2
   - C7-S4 Models of equivalent fractions
   - C7-S5 Model division of sets into 2,3,4 equal par
2. Adds and subtracts, including money, to 3 and 4 digits with regrouping
   - C8-S1 4-digit addition without regrouping
   - C8-S2 3-digit addition without regrouping: Level 1
   - C9-S1 4-digit addition without regrouping
   - C9-S2 3-digit addition without regrouping: Level 1
   - C5-S1 Add/subtract money to $5
   - C13-S1 4-digit addition with regrouping
   - C13-S2 3-digit addition with regrouping: Level 1
   - C11-S1 4-digit subtraction with regrouping
   - C11-S2 3-digit subtraction with regrouping: Level 2
3. Compute basic multiplication facts (0 – 10)
   - C17-S1 Multiplication facts: Level
4. Solves story problems involving addition, subtraction and multiplication
   - C12-S1 Word problems without regrouping

- C12-S2 Problem solving involving multiplying 10 by 1-digit
- C12-S3 Relate informal language to mathematical language and symbols: Level 1
- C12-S4 Word problems with regrouping

5. Create, analyze and extend growing patterns
   - C3-S1 Numeric Patterns (ascending)
   - C3-S2 Geometric patterns: Level 2
   - C3-S3 Analyze patterns: Level 2
6. Select and use appropriate tools and units to estimate and measure length, weight, capacity, and time (customary and metric)
   - C4-S1 Estimate length/ weight/ capacity: Level 1
   - C4-S2 Calendar: Level 1
   - C4-S3 Problem solving: elapsed time: Level 2
   - C4-S4 Customary linear unit equivalence
   - C4-S5 Customary weight and capacity unit equivalences
   - C4-S6 Measure pounds
   - C4-S7 Metric equivalences: cm and m
   - C4-S8 Measure length to the nearest half-inch
7. Collect, interpret, and organize data to make predictions
   - C2-S1 Make predictions based on data
   - C2-S2 Bar graphs: Level 3
   - C2-S3 Pictographs: Level 3
   - C16-S1 Predict experiment outcomes: Level 2
   - C16-S2 Probability of chance

Fourth Grade Power Standards

Understand and demonstrate knowledge of fourth grade Utah Sate Core math language and symbols.

1. Multiply (3 digit by 2 digit) and divide (3 digit dividend by a one digit divisor) accurately showing mastery of multiplication facts 0-10
   - C12-S1 1-digit multipliers without regrouping: Level 2
   - C12-S3 Multiplication facts: Level 2
   - C16-S1 1-digit multipliers with regrouping: Level 2
   - C16-S2 2-digit multipliers
   - C9 S1 1-digit divisors without remainders
   - C9-S2 Recall division facts: Level 2
   - C15-S1 1-sigit divisors, 2- and 3-digit dividends with remainders
2. Use, create, and understand graphs, charts, tables, and coordinate grids.
   - C2-S2 Bar graphs: Level 4
   - C2-S3 Line Plots
   - C2-S4 Charts and graphs: word and application
   - C2-S5 Frequency Tables
   - C2-S6 Representation of data: Level 1
   - C7-S6 Coordinate locations: Level 1
3. Model understanding of equivalent fractions by adding and subtracting simple fractions where one single digit denominator is 1, 2, or 3 times the other.
   - C6-S1 Models of equivalent fractions
   - C6-S2 Fractional parts representation: Level 2
   - C6-S3 Add/subtract fractions with like denominators: Level 1

4. Select appropriate methods and tools for problem solving using estimation, mental math, calculators, and paper and pencil.
   - C8-S1 Relate informal language to mathematical language and symbols
   - C8-S2 Word problems with division
   - C8-S3 Estimation strategies for problem-solving: Level 1
   - C8-S4 Multi-step word problems: Level 2
   - C8-S5 Word problems with multiplication: Level 2
5. Understand place-value and be able to represent and compare whole numbers and decimals.
   - C1-S3 Compare the relative size of numbers: Level 2
   - C1-S4 Expanded form through ten thousands
   - C1-S5 Compare/order through 99,999
   - C1-S6 Before/after/between: Level 2
   - C1-S7 Place value through millions
   - C1-S9 Demonstrate multiple ways to represent numbers: Level 1
   - C1-S10 Place value through hundreds
   - C1-S11 Compare expressions: Level 2
   - C14-S1 Locate decimals to tenths on a number line
   - C14-S2 Identify decimals through hundredths
   - C14-S4 Compare/order decimals through tenths
6. Using variables write and solve equations to express single operation problems.
   - C10-S1 Solve linear equations
   - C10-S2 Recognize how variables maintain the same value
   - C10-S3 Equations with variable for unknown
7. Understand attributes and properties of geometric objects including the area and perimeter of rectangles and right triangles.
   - C7-S1 Area of rectangles
   - C7-S2 Types of angles: Level1
   - C7-S3 Models to develop formulas for finding areas of triangles, parallelograms and circles
   - C7-S4 Parts of circles
   - C7-S5 Types of lines
   - C7-S7 Areas with fixed perimeters
   - C7-S9 Symmetry
   - C7-S10 Measure angles using a protractor
   - C7-S12 Models to develop the relationship between square units in a rectangle and the length and width of the figure

Fifth Grade Power Standards

Understand and demonstrate knowledge of fifth grade Utah State Core math language and symbols.

Number Sense and Operations

1. Read and write numbers in standard and expanded form from thousandths to one billion.
   - C1-S2 Demonstrate multiple ways to represent numbers: Level 2
   - C1-S10 Identify numbers through 999,999,999
   - C1-S11 Expanded form using multiplication through millions

2. Demonstrate multiple ways to represent whole numbers, decimals, fractions, percents, and integers using models and symbols.
   - C1-S2 Demonstrate multiple ways to represent numbers: Level 2
   - C12-S1 Express decimals as fractions
3. Add, subtract, multiply, and divide decimals and whole numbers. Add, subtract, and multiply fractions with like and unlike denominators.
   - C4-S6 Multiply fractions
   - C4-S7 Add/subtract fractions with like denominators: Level 2
   - C4-S8 Add/subtract fractions with unlike denominators: level 1
   - C10-S4 Convert improper fractions and mixed numbers: Level 2
   - C10-S1 Multiply by 100 and 1,000
   - C12-S4 Models to multiply a 1 or 2 digit whole number by a decimal
   - C12-S5 Multiply decimals by 10, 100, and 1,000
   - C12-S6 Add decimals through hundredths
   - C12-S7 Subtract decimals through hundredths
   - C13-S1 1-digit divisors, 2-and 3-digit dividends with remainders
   - C14- S1 2-digit multipliers

Patterns Within Problem Solving

4. Use of order of operations involving addition, subtraction, multiplication, division and parenthesis in solving multiple step problems.
   - C6-S1 Word problems with division (with remainders)
   - C6-S2 Word problems with multiplication: Level 2
   - C6-S3 Word problems with decimals and money: Level1
   - C6-S4 Word problems involving addition/subtraction of fractions with like denominators
5. Write and solve simple algebraic equations and inequalities with whole number solutions (e.g., $6x = 54$; $x + 3 = 7$).
   - C8-S1 Writing Two-Step Equations
   - C8-S2 Solve linear equations

Statistics & Data

6. Create and analyze data, types of probability, and statistics using appropriate graphs.
   - C2-S1 Bar graphs: Level 5
   - C2-S2 Line Plots
   - C2-S3 Compare graphic data: Level 2
   - C2-S4 Data use: Level 2
   - C2-S5 Representation of data: Level 2
   - C2-S6 Line graphs: Level 3
   - C9-S1 Probability as fractions: Level 2
   - C9-S2 Predictions from probability experiments
   - C9-S3 Probability as decimals

Geometry & Measurement

7. Classify and identify attributes of solids and be able to determine surface area and volume.
   - C5-S5 Model volume
   - C5-S6 Recognize solid geometric figures: Level 2
   - C5-S7 Volume of rectangular prisms
   - C5-S11 Surface area
   - C5-S12 Plane/solid figure attributes: Level 2

8. Determine area of regular and irregular polygons (using different units of measurements
   - C5-S10 Areas of irregular figures

Sixth Grade

1. Students will evaluate numerical expressions with powers and exponents using order of operations.
2. Students will find the sum, difference, product and quotient of integers.
3. Students will use ratios, proportions and percents.
4. Students will find the sum, difference, product and quotient of fractions.
5. Students will find capacity, length and mass using customary and metric systems.

Seventh Grade

1. Students will simplify and evaluate algebraic expressions using order of operations with rational numbers.
2. Students will solve one and two step equations using integers.
3. Students will evaluate ratios, rates and scales using scale models.
4. Students will find the sum, difference, product and quotient using rational numbers including fractions, percents and decimals.
5. Students will find perimeter, surface area and volume.

Pre-Algebra

1. Students will solve one and two step equations using rational numbers.
2. Students will use the Distributive Property forwards to simplify and factor algebraic and numeric expressions.
3. Students will use Order of Operations to simplify and evaluate numeric and algebraic expressions including rational numbers.
4. Students will be able to graph lines and determine the slope through various methods.
5. Students will demonstrate the ability to apply and interpret statistical data and probability.