SRPSD Grade 3 Math Rubrics

Part A: Number Strand

N3.1a Demonstrate understanding of whole numbers to 1000 by representing and describing.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
Student needs assistance to use base ten blocks to represent a quantity to 1000.	Student is able to represent a quantity to 1000 using base ten blocks.	Student is able to represent a quantity to 1000 using symbolic representation.	Student is able to represent a quantity to 1000 in a non-standard arrangement.

N3.1b Demonstrate understanding of whole numbers to 1000 by estimating with referents.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
Student needs assistance using referent in order to estimate.	Student estimates by either guessing or incorrectly using a referent.	Student is able to use a referent to estimate.	Student is able to use a referent to estimate and explain how they used the referent to get their answer.

N3.1c Demonstrate understanding of whole numbers to 1000 by comparing and ordering.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
Student needs assistance to compare numbers.	Student is able to compare numbers.	Student is able to order a set of numbers.	Student is able to order a set of numbers and explain their strategy.

N3.2a Demonstrate understanding of addition (limited to 1, 2, and 3-digit numerals) with sums to 1000.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
Student needs assistance adding numbers to 1000.	Student can add numbers to 1000 that do not require regrouping.	Student is able to add numbers to 1000 using a regrouping strategy.	Student is able to solve situational addition story problems.

N3.2b Demonstrate understanding of subtraction (limited to 1, 2, and 3-digit numerals) with sums to 1000.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
Student needs assistance adding numbers to 1000.	Student can subtract numbers to 1000 that do not require regrouping.	Student is able to subtract numbers to 1000 using a regrouping strategy.	Student is able to solve situational subtraction story problems.

N3.2c Demonstrate understanding of estimation using addition or subtraction

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
Student needs assistance to round numbers to 1000.	Student is able to round numbers.	Student is able to use a personal strategy to estimate an addition or subtraction problem.	Student is able to estimate an addition or subtraction problem and justify their reasoning.

N3.3a Demonstrate understanding of multiplication to 5 x 5 by representing and explaining using repeated addition or subtraction, equal grouping, and arrays, modelling processes using concrete, physical, and visual representations, and recording the process symbolically.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
Student needs assistance to determine the result of a multiplication equation.	Student is able to provide an answer to solve a multiplication equation.	Student is able to provide an answer to solve a multiplication equation and explain a strategy.	Student is able to solve a multiplication situational problem with a multiplication sentence.

N3.3b Demonstrate understanding of division to 5 x 5 by representing and explaining using repeated addition or subtraction, equal grouping, and arrays, modelling processes using concrete, physical, and visual representations, and recording the process symbolically.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
Student needs assistance to determine the result of a division equation.	Student is only able to provide an answer to solve a division equation.	Student is only able to provide an answer to solve a division equation and explain a strategy.	Student is able to solve a division situational problem.

N3.3c Demonstrate understanding of relating multiplication and division.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
Student needs assistance to determine the multiplication or division facts.	Student is able to write the multiplication fact but not the division fact.	Student is able to write the related multiplication **and** division facts.	Student is able to identify related division/multiplication facts in a situation.

N3.4 Demonstrate understanding of fractions by representing, observing and describing situations.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
Student needs assistance to identify representations of fractions.	Student is able to draw a representation of a fraction.	Student is able to draw a representation of a fraction and can explain that a fraction is made up of equal parts.	Student is able to compare and relate quantities to a given fraction.

Part B: Pattern & Relations Strand

P3.1a Demonstrate understanding of increasing patterns by observing and describing, extending, comparing, creating patterns.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
Student needs assistance to extend an increasing pattern and identify the pattern rule.	Student is able to extend an increasing pattern but cannot explain the pattern rule.	Student is able to create an increasing pattern and can explain the pattern rule.	Student is able to engage in error analysis and can explain their thinking.

P3.1b Demonstrate understanding of decreasing patterns by observing and describing, extending, comparing, creating patterns.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
Student needs assistance to extend a decreasing pattern and identify the pattern rule.	Student is able to extend a decreasing pattern but cannot explain the pattern rule.	Student is able to create a decreasing pattern and can explain the pattern rule.	Student is able to engage in error analysis and can explain their thinking.

P3.2 Demonstrate understanding of equality by solving one-step addition and subtraction equations involving symbols representing an unknown quantity.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
Student needs assistance to solve one step addition/subtraction equations.	Student is able to solve one step addition/subtraction equations where the variable is the sum/difference.	Student is able to solve one step addition/subtraction equations.	Student is able to create and solve one step equations related to situational questions.

SRPSD Grade 3 Math Rubrics

Part C: Shape & Space Strand

SS3.1 Demonstrate understanding of the passage of time by relating common activities to standard and non-standard units, describing relationships between units, and solving situational questions.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
Student needs assistance to identify events that involve passage of time.	Student is able to compare common activities involving non-standard passages of time.	Student is able to relate common activities to standard units.	Student is able to solve a situational problem involving the passage of time.

SS3.2 Demonstrate understanding of measuring mass in g and kg by selecting and justifying referents for g and kg, modelling and describing the relationship between g and kg, estimating mass using referents, measuring and recording mass.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
Student needs assistance to choose the appropriate non-standard unit.	Student is able to select a referent	Student is able to use **g** or **kg** units for measuring and record the mass of an object.	Student is able to estimate the mass of an object using **g** or **kg**.

SS3.3 Demonstrate understanding of linear measurement (cm and m) by selecting and justifying referents, generalizing the relationship between cm and m, estimating length and perimeter using referents, measuring and recording length, width, height, and perimeter.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
Student needs assistance to choose the appropriate non-standard unit.	Student is able to select a referent	Student is able to use **cm** or **m** units for measuring the perimeter of an object.	Student is able to estimate the length of an object using **cm** or **m**.

SS3.4 Demonstrate understanding of 3-D objects by analyzing characteristics including faces, edges, and vertices.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
Student needs assistance in constructing or correctly naming a 3-D object.	Student is able to identify attributes of 3-D objects. (faces, vertices….).	Student is able to compare two 3-D objects using attributes like (faces, vertices….).	Student is able to sort 3 –D objects and explain the sorting rule used.

SS3.5 Demonstrate understanding of 2-D shapes (regular and irregular) including triangles, quadrilaterals, pentagons, hexagons, and octagons by describing, comparing, and sorting.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
Student needs assistance in constructing or correctly naming a 2-D shape.	Student is able to construct and name a 2-D shape.	Student is able to compare two 2-D shapes using attributes like (sides, corners curved, regular and irregular….)	Student is able to sort 2-D shapes and explain the sorting rule used.

Part D: Statistics & Probability Strand

SP3.1 Demonstrate understanding of first-hand data using tally marks, charts, lists, bar graphs, and line plots (abstract pictographs), by collecting, organizing, and representing and solving situational questions.

Beginning (1)	Approaching (2)	Proficiency (3)	Mastery (4)
Student needs assistance to collect data.	Student is able to collect data.	Student is able to organize and represent data in a graph.	Student is able to analyze interpretations of graphs and explain whether or not the interpretation is valid based on the data display.