# SRPSD Grade 1 Math Rubrics

## Part A: Number Strand

### N1.1a Say the whole number sequence 0 to 100 by 1s forward between any two given numbers.

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| With continuous teacher assistance the student has partial success. | The student is able to count by 1 from 0 – 100 with minimal teacher prompting, a number line or 100 chart. | The student is able to start anywhere and count forward to 100 independently. | The student can state the number that comes after another number. |

### N1.1b Say the whole number sequence 100 to 0 by 1s backward between any two given numbers.

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| With continuous teacher assistance the student has partial success. | The student is able to count backwards by 1 from 100 – 0 with minimal teacher prompting, a number line or 100 chart. | The student is able to start anywhere and count backwards independently. | The student can state the number that comes before another number. |

### N1.1c Say the whole number 0 to 20 by 2s forward starting at 0.

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| With teacher assistance the student has partial success. | The student is able to skip count starting at 0 by 2s to 20 with a number line or 100's chart with prompting. | Student is able to skip counts by 2s from 0 to 20 independently. | When given a number the student can identify what comes next. |

### N1.1d Say the whole number 0 to 100 by 5s forward starting at 0.

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| With teacher assistance the student has partial success. | The student is able to skip count starting at 0 by 5s to 100 with a number line or 100's chart with prompting. | Student is able to skip count by 5s from 0 to 100 independently. | When given a number the student can identify what comes next. |

### N1.1e Say the whole number 0 to 100 by 10s forward starting at 0.

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| With teacher assistance the student has partial success. | The student is able to skip count starting at 0 by 10s to 100 with a number line or 100's chart with prompting. | Student is able to skip count by 10s from 0 to 100 independently. | When given a number the student can identify what comes next. |

### N1.2 Recognize at a glance (subitize) and name familiar arrangements of 1 – 10 objects, dots, and pictures.

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| The student consistently attempts to count (aloud or in their head) to arrive at an answer of familiar arrangements of 1 – 10. | The student is able to recognize/subitize at a glance some of the familiar arrangements of 1-10. | The student is able to recognize/subitize at a glance all familiar arrangements of 1-10. Provides the answer instantly. | The student is able to recognize/subitize non-standard arrangements. |

### N1.3a Demonstrate an understanding of counting by indicating the last number said identifies "how many".

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| The student doesn't count the objects. May state a random number. | The student repeatedly recounts the collection without ever isolating the last number said. | When asked students are able to state the amount they counted. | The student is able to verbalize the purpose of counting (ie. to determine a quantity). |

## N1.3b Demonstrate an understanding of counting by showing any set has only one count using the counting on strategy.

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| The student counts all the blocks but makes a mistake. | The student goes back and recounts the entire set. | The student counts on from the given set. | The student is able to justify why they used the counting on strategy. |

## N1.3c Demonstrate an understanding of counting by using parts or equal groups to count sets.

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| The student counts by 1s. | The student attempts to count by parts or equal groups but is unsuccessful. | The student is able to count the set using parts or equal groups. | The student is able to count by parts or equal groups in more than one way. |

## N1.4 Represent and describe whole numbers to 20 concretely, pictorially, and symbolically. (Written)

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| With support the student can represent and describe their number concretely, pictorially, and symbolically. | The student's representation of their number does not match concretely, pictorially, and symbolically. | The student is able to accurately represent the number symbolically. The student is able to represent their number in at least 2 different ways. | The student is able to further represent and describe their number using symbols only. |

## N1.5 Compare sets containing up to 20 elements to solve problems using referents and one-to-one.

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| Student needs assistance to represent a quantity less than 20. | Student is able to represent a quantity less than 20. | Student is able to represent a quantity that is equal to, more than or less than a given quantity. | Student is able to compare numbers using comparative language using words like, more, fewer, or as many. |

## N1.6 Estimate quantities to 20 by using referents.

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| Student requires teacher support in order to estimate a quantity. | The student estimates an unreasonable amount. | The student estimates a reasonable amount. | The student estimates a reasonable amount and is able to explain why the estimation is reasonable. |

## N1.7 Demonstrates concretely, physically, and pictorially, how whole numbers can be represented by a variety of equal groupings with and without singles. (Written)

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| Student requires teacher support or assistance to represent whole numbers in equal groups. | The student is able to divide the quantity into either equal groups with singles or equal groups without singles. | The student is able to divide the quantity into equal groups with and without singles. | The student is able to divide the quantity in an additional way. |

## N1.8 Identify the number up to 20 that is one more, two more, one less, and two less than a given number.

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| Student requires teacher support or assistance to understand the meaning of more or less than. | The student is unable to answer all questions accurately. The student is able to correctly answer all questions using a number line or 100's chart. | The student is able to independently answer all questions correctly. | The student is able to correctly answer a story problem. |

N1.9A Demonstrates an understanding of addition of numbers with answers to 20 concretely, pictorially, physically, and symbolically by:

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| Student requires teacher support or assistance to create an addition sentence. | The student is able to determine quantities but does not put them together to create an addition sentence. | The student is able to create and solve an addition story and is able to record their story symbolically. | The student is able to create an addition story and corresponding sentence in their own context. |

N1.9B Demonstrates an understanding of subtraction of numbers with answers to 20 concretely, pictorially, physically, and symbolically by:

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| Student requires teacher support or assistance to create subtraction sentence. | The student is able to determine quantities but does not put them together to create a subtraction sentence. | The student is able to create and solve a subtraction story and is able to record their story symbolically. | The student is able to create a subtraction story and corresponding sentence in their own context. |

N1.10A Describe and use mental mathematics strategies (memorization not intended) to determine basic addition facts to 18.

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| The student requires teacher support or assistance to solve the addition question. | The student is able to solve the addition question but is unable to name the strategy **or** the student can name a strategy to use but the answer is incorrect. | The student is able to independently solve the addition question and explain their strategy. | The student is able to describe another strategy to solve the subtraction question (especially the related subtraction fact). |

N1.10B Describe and use mental mathematics strategies (memorization not intended) to determine basic subtractions facts to 18.

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| The student requires teacher support or assistance to solve the subtraction question. | The student is able to solve the subtraction question but is unable to name the strategy **or** the student can name a strategy to use but the answer is incorrect. | The student is able to independently solve the subtraction question and name their strategy. | The student is able to describe another strategy to solve the subtraction question (especially the related addition fact). |

## Part B: Pattern & Relations Strand

P1.1 Demonstrate an understanding of a repeating pattern (two to four elements)

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| With support the student can create a pattern. | The student is able to make their own pattern but cannot explain why it is a pattern. | The student can independently create a repeating pattern and explain why it is a pattern. | The student is able to find and correct an error in a pattern. |

P1.2 Translate repeating patterns from one form of representation to another.

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| With teacher assistance the student can translate a repeating pattern. | The student is able to translate a repeating pattern but requires an initial teacher prompt. The student has partial understanding of the concept of translating but cannot always do it correctly. | The student can independently translate a repeating pattern from one form of representation to another. (colour to shape, action to sound…) | The student can explain why their pattern has been translated from one form to another. |

P1.3 Describe equality as a balance and inequality as an imbalance, concretely, physically, and pictorially (0 – 20).

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| With teacher assistance the student can create equal and unequal groups. | The student is able to create equal **or** unequal groups. They may require some prompting to begin. | The student can independently create equal and unequal groups concretely, physically, and pictorially. | The student can explain the process used to determine whether two concrete sets are equal or unequal. |

P1.4 Record equalities using the equal symbol. *(this outcome/rubric could fit in with addition question. Two rubrics, one question.) (Written)

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| With teacher assistance the student is able to record an equality using the equal symbol. | The student is able to record an equality with teacher prompting. There may be mistakes in their work. | The student is able to independently record an equality using the equal symbol. | The student can rewrite an equality by moving the equal sign to the other side. |

## Part C: Shape & Space Strand

SS1.1 Demonstrates an understanding of measurement as a process of comparing.

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| With teacher assistance the student is able to order and compare objects. | The student is able to order objects but is unable to verbally compare them. | The student is able to independently order, compare, and make statements of comparison. | The student can compare items in their environment according to length, height, mass, volume, capacity or area and explain their reasoning. |

SS1.2 Sort 3-D objects and 2-D shapes using one attribute, and explain the sorting rule.

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| With teacher assistance the student is able to sort the shapes may be able to explain the sorting rule. | The student is able to sort the objects but is unable to explain their sorting rule. | The student is able to independently sort and explain their sorting rule. | The student is able to determine the sorting rule when given two pre-sorted sets. |

SS1.3 Replicate composite 2-D shapes and 3-D objects.

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| With continuous teacher assistance the student is able to replicate a given composite 2-D shape and 3-D object. | The student is able to replicate a given composite 2-D shape and 3-D object with some teacher prompting. | The student is able to independently replicate a given composite 2-D shape and 3-D object. | The student is able to explain a strategy to verify that their replication is accurate. |

SS1.4 Compare 2-D shapes to parts of 3-D objects in the environment.

| Beginning (1) | Approaching (2) | Proficiency (3) | Mastery (4) |
|---|---|---|---|
| With teacher assistance the student is able to identify something in their environment to match a given 2-D shape. | The student is able to identify something in their environment to match a given 2-D shape when the teacher narrows the choices to a small number of objects. | The student is able to independently identify objects in their environment that match a given 2-D shape. | The student is able to explain the similarities and differences between the 2-D and 3-D objects. |