

Rochester City School District

Grade 2 Mathematics

Performance Based Assessment RUBRIC

There are 13 tasks for a total 112 of possible points

Rochester City School District Second Grade Mathematics Performance Assessment Task 1 Rubric

Represent and solve problems involving addition and subtraction.

- **2.OA.1** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in Task
1 point Incorrectly solves entire problem. No strategy for solving problem is apparent.	2 point Equation is partially accurate. Explanation is non-existent. Relies on counting as primary strategy for solving problem.	3 point Correctly solves the problem and attempts to use a strategy such as making tens, create easier or known sums, and basic facts. Equation is accurate but explanation is unclear.	4 point Correctly solves the problem and successfully uses a strategy such as making tens, creates easier or known sums, and basic facts. Equation is accurate and explanation is clear
1 point Incorrectly solves entire problem. No strategy for solving problem is apparent	2 point Equation is partially accurate. Explanation is non-existent. Relies on counting as primary strategy for solving problem.	3 point Correctly solves the problem and attempts to use a strategy such as making tens, create easier or known sums, and basic facts. Equation is accurate but explanation is unclear.	4 point Correctly solves the problem and successfully uses a strategy such as making tens, creates easier or known sums, and basic facts. Equation is accurate and explanation is clear
1 point Incorrectly solves entire problem. No strategy for solving problem is apparent	2 point Equation is partially accurate. Explanation is non-existent. Relies on counting as primary strategy for solving problem.	3 point Correctly solves the problem and attempts to use a strategy such as making tens, create easier or known sums, and basic facts. Equation is accurate but explanation is unclear.	4 point Correctly solves the problem and successfully uses a strategy such as making tens, creates easier or known sums, and basic facts. Equation is accurate and explanation is clear
1 point Incorrectly solves entire problem. No strategy for solving problem is apparent	2 point Equation is partially accurate. Explanation is non-existent. Relies on counting as primary strategy for solving problem.	3 point Correctly solves the problem and attempts to use a strategy such as making tens, create easier or known sums, and basic facts. Equation is accurate but explanation is unclear.	4 point Correctly solves the problem and successfully uses a strategy such as making tens, creates easier or known sums, and basic facts. Equation is accurate and explanation is clear

Rochester City School District Second grade Mathematics Performance Assessment Task 2 Rubric

Work with equal groups of objects to gain foundations for multiplication

- **2.OA.4** Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in Task
1 point Student does not create an array	2 point Student is able to create one array but does not create a second array that is different.	3 point Student is able to create two arrays but does not create a second array that is different.	4 point Student successfully creates two different arrays.
1 point Student's drawing(s) does not represent array(s) created.	2 point Student's drawing(s) represents an array(s) but not one created by the student.	3 point Student's drawing(s) accurately represents one of the arrays created.	4 point Student's drawings accurately represent s both arrays created.
1 point Student is unable to write an equation indicating repeated groups.	2 point Student writes an equation(s) that does not indicate repeated groups.	3 point Student writes one equation(s) that indicates repeated groups.	4 point Student writes two equations that indicate repeated groups

Rochester City School District Second grade Mathematics Performance Assessment Task 3 Rubric

Understand place value.

- 2.NBT.2 Count within 1000; skip-count by 5s, 10s, and 100s.

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in Task
<u>1 point</u> Student correctly completes few of the given skip counting patterns Few= 0-3	<u>2 point</u> Student correctly completes some of the given skip counting patterns Some= 4-5	<u>3 point</u> Student correctly completes most of the given skip counting patterns Most= 6- 7	<u>4 point</u> Student correctly completes all of the given skip counting patterns All= 8- 9

Rochester City School District Second grade Mathematics Performance Assessment

Task 4 Rubric

Understand place value.

- 2.NBT.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in Task
1 point Student is able to correctly write few of the given numbers in standard form Few= 0-1	2 point Student is able to correctly write some of the given numbers in standard form Some= 2	3 point Student is able to correctly write most of the given numbers in standard form Most= 3	4 point Student is able to correctly write all of the given numbers in standard form
1 point Student is able to correctly write few of the given numbers in word form Few= 0-1	2 point Student is able to correctly write some of the given numbers in word form Some= 2	3 point Student is able to correctly write most of the given numbers in word form Most= 3	4 point Student is able to correctly write all given numbers in word form
1 point Student is able to correctly write few of the given numbers in expanded form Few= 0-1	2 point Student is able to correctly write some of the given numbers in expanded form Some= 2	3 point Student is able to correctly write most of the given numbers in expanded form Most= 3	4 point Student is able to correctly write all of the given numbers in expanded form

Rochester City School District Second grade Mathematics Performance Assessment Task 5 Rubric

Use place value understanding and properties of operations to add and subtract.

2.NBT.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in Task
<u>1 point</u> Student correctly completes few of the given questions and does not use an appropriate mathematical model Few= less than 2	<u>2 point</u> Student correctly completes some of the given questions and uses an appropriate mathematical model. Some= 2-3	<u>3 point</u> Student correctly completes most questions and uses an appropriate mathematical model. Most= 4-5	<u>4 point</u> Student correctly completes all questions given and uses an appropriate mathematical model.

Rochester City School District Second grade Mathematics Performance Assessment Task 6 Rubric

Use place value understanding and properties of operations to add and subtract.

- **2.NBT.6** Add up to four two-digit numbers using strategies based on place value and properties of operations.

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in Task
<u>1 point</u> Student demonstrates little understanding of the task.	<u>2 point</u> Student has a minor computational error and cannot clearly demonstrate their process	<u>3 point</u> Student correctly answers the question and cannot clearly demonstrate their process OR student has a minor computational error and uses an appropriate strategy	<u>4 point</u> Student correctly answers the question and uses an appropriate strategy.

Rochester City School District Second grade Mathematics Performance Assessment Task 7 Rubric

Use place value understanding and properties of operations to add and subtract.

- **2.NBT.7** Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in Task
<p>1 point Student can correctly complete few questions and does not use an appropriate mathematical strategy. Few=1</p>	<p>2 point Student can correctly complete some questions and uses an appropriate mathematical strategy. Some= 2</p>	<p>3 point Student can correctly complete most questions and uses an appropriate mathematical strategy. Most= 3</p>	<p>4 point Student correctly completes all questions and uses an appropriate mathematical strategy.</p>

Rochester City School District Second grade Mathematics Performance Assessment Task 8 Rubric

Use place value understanding and properties of operations to add and subtract.

- **2.NBT.8** Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in Task
1 point Student inconsistently adds or subtracts ten more or ten less to a given number Less than 4 boxes	2 point Student is able to add or subtract ten more or ten less to some given numbers Some=4-5 boxes	3 point Student is able to add or subtract ten more or ten less to most given numbers Most= 6-7 boxes	4 point Student is able to add or subtract ten more or ten less to any given number
1 point Student inconsistently adds or subtracts 100 more or 100 less to a given number Less than 4	2 point Student is able to add or subtracts 100 more or 100 less to some given numbers Some= 4-5 boxes	3 point Student is able to add or subtracts 100 more or 100 less to most given numbers Most= 6-7	4 point Student is able to add or subtracts 100 more or 100 less to any given number

Rochester City School District Second Grade Mathematics Performance Assessment Task 9 Rubric

Add and subtract within 20

- **2. OA. 2** Fluently add and subtract within 20 using mental strategies

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in Task
1 point Student is only able to add and subtract within 20 using mental strategies rarely 0-5 problems correct	2 point Student is able to add and subtract within 20 using mental strategies sometimes 6-10 problems correct	3 point Student is able to add and subtract within 20 using mental strategies most of the time 11-15 problems correct	4 point Student is able to add and subtract within 20 using mental strategies 16-20 problems correct

Rochester City School District Second Grade Mathematics Performance Assessment Task 10 Rubric

Reason with shapes and their attributes.

- **2.G.1** Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.

*Sizes are compared directly or visually, not compared by measuring.

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in Task
1 point Student is able to accurately identify 0-3 of the 12 two-dimensional and 3-dimensional shapes.	2 point Student accurately identifies 3-6 of 12 two-dimensional and three-dimensional shapes.	3 point Student accurately identifies 6-9 of 12 two-dimensional and three-dimensional shapes.	4 point Student accurately identifies 10-12 two-dimensional and three-dimensional shapes.
1 point Student accurately draws 0 or 1/4 of the two-dimensional shapes.	2 point Student accurately draws 2/4 of the two-dimensional shapes.	3 point Student accurately draws 3/4 of the two-dimensional shapes.	4 point Student accurately draws all four of the two-dimensional shapes.
1 point Student is able to accurately identify the number of sides of 1 of the two or three-dimensional shapes.	2 point Student is able to accurately identify the number of sides of 2 of the two or three-dimensional shapes.	3 point Student is able to accurately identify the number of sides of 3 of the two or three-dimensional shapes.	4 point Student is able to accurately identify the number of sides of 4 of the two or three-dimensional shapes.
1 point Student is able to accurately identify the number of corners of 1 of the two or three-dimensional shapes	2 point Student is able to accurately identify the number of corners of 2 of the two or three-dimensional shapes	3 point Student is able to accurately identify the number of corners of 3 of the two or three-dimensional shapes.	4 point Student is able to accurately identify the number of corners of 4 of the two or three-dimensional shapes.

Rochester City School District Second Grade Mathematics Performance Assessment Task 11 Rubric

Reason with shapes and their attributes.

- **2.G.3.** Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in Task
<u>1 point</u> Student is unable to divide the circles into equal shares	<u>2 points</u> Student is able to divide a circle into one of the equal shares	<u>3 points</u> Student is able to divide circles into two of the equal shares	<u>4 points</u> Student is able to divide circles into each of the equal shares
<u>1 point</u> Student is unable divide the rectangle into equal shares and cannot identify any of the fractional parts given.	<u>2 points</u> Student is able divide the rectangle into one of the equal shares and correctly identifies one of the fractional parts given	<u>3 points</u> Student is able divide the rectangle into two of the equal shares and correctly identifies two of the fractional parts given.	<u>4 points</u> Student is able divide the rectangle into all three of the equal shares and correctly identifies all three of the fractional parts given.
<u>1 point</u> Student does not recognize and cannot group the shapes by identifying equal shares or fractional amounts.	<u>2 points</u> Student recognizes and groups few shapes by identifying that the wholes do not have the same shape but the same fractional amount	<u>3 points</u> Student recognizes and groups most shapes by identifying that the wholes do not have the same shape but the same fractional amount	<u>4 points</u> Student recognizes and groups all shapes by identifying that the wholes do not have the same shape but the same fractional amount

Rochester City School District Second Grade Mathematics Performance Assessment Task 12 Rubric

Work with Time and Money

- **2.MD.7** Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
- **2.MD.8** Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in Task
1 point Student demonstrates little or no understanding of telling time.	2 points Student demonstrates limited understanding of telling time.	3 points Student demonstrates understanding of telling time but with minor errors. May have limited understanding of AM/PM	4 points Student accurately tells time and demonstrates understanding of AM and PM by describing an appropriate activity for that time of the day.
1 point Student demonstrates little or no understanding of coins and money.	2 points Student demonstrates limited understanding of coins and money.	3 points Student uses correct procedures when solving word problems associated with money, but may make a calculation error.	4 points Student uses a mathematically sound procedure to get accurate answer to a word problem involving money.

Rochester City School District Second Grade Mathematics Performance Assessment

Task 13

Represent and interpret data

- **2.MD.9** Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.
- **2.MD.10** Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems¹ using information presented in a bar graph.

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in Task
1 point Student demonstrates little or no understanding of line plots.	2 points The student's line plot contains multiple errors. Student demonstrates limited understanding of line plots.	3 points Student completes the line plot with some minor errors.	4 points Student accurately completes the line plot.
1 point Student demonstrates little or no understanding of picture graphs.	2 points The student is able to create a picture graph but it contains multiple errors. Student demonstrates limited understanding of picture graphs. Student is unable to solve simple put together, take apart and compare problems	3 points Student is able to complete a picture graph with some minor errors. Student is able to solve some simple put together, take apart and compare problems	4 points Student is able to accurately complete a picture graph using a provided key. Student is able to answer questions based on the data correctly.