

Rochester City School District

Grade 1 Mathematics

Performance Based Assessment RUBRIC

There 14 tasks for a total of 92 possible points

Rochester City School District Grade 1 Mathematics Performance Assessment

Task 1 Rubric

Represent and solve problems involving addition and subtraction.

- **1.OA.1** Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, and comparing with unknowns in all positions.

Understand and apply properties of operations and the relationship between addition and subtraction.

- **1.OA.3** Apply properties of operations as strategies to add and subtract.
- Add and subtract within 20.
- **1.OA.4** Understand subtraction as an unknown-addend problem.

Add and subtract within 20.

- **1.OA.6** Add and subtract within 20, demonstrating fluency for addition and subtraction within 10.

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in This Task
1 point Student is unable to identify any possible combinations to ten in order to accurately solve the word problems.	2 point Student accurately solves the word problem identifying some possible combinations to ten	3 point Student accurately solves the word problem identifying most of possible combinations to ten	4 point Student accurately solves the word problem identifying all possible combinations to ten
1 point Student is unable to write the number sentence, use symbols to do so, solve the problem accurately or show his or her thinking using pictures, numbers or words	2 point Student meets some criteria (write the number sentence, use symbols to do so, solve the problem accurately or show his or her thinking using pictures, numbers or words).	3 point Student meets most criteria (write the number sentence, use symbols to do so, solve the problem accurately or show his or her thinking using pictures, numbers or words).	4 point Student meets all criteria (write the number sentence, use symbols to do so, solve the problem accurately or show his or her thinking using pictures, numbers or words).
1 point Student is unable to write the number sentence, use symbols to do so, solve the problem accurately or show his or her thinking using pictures, numbers or words	2 point Student meets some criteria (write the number sentence, use symbols to do so, solve the problem accurately or show his or her thinking using pictures, numbers or words).	3 point Student meets most criteria (write the number sentence, use symbols to do so, solve the problem accurately or show his or her thinking using pictures, numbers or words).	4 point Student meets all criteria (write the number sentence, use symbols to do so, solve the problem accurately or show his or her thinking using pictures, numbers or words).
1 point Student is unable to write the number sentence, use symbols to do so, solve the problem accurately or show his or her thinking using pictures, numbers or words	2 point Student meets some criteria (write the number sentence, use symbols to do so, solve the problem accurately or show his or her thinking using pictures, numbers or words).	3 point Student meets most criteria (write the number sentence, use symbols to do so, solve the problem accurately or show his or her thinking using pictures, numbers or words).	4 point Student meets all criteria (write the number sentence, use symbols to do so, solve the problem accurately or show his or her thinking using pictures, numbers or words).
1 point Student is unable to write the number sentence, use symbols to do so, solve the problem accurately or show his or her thinking using pictures, numbers or words	2 point Student meets some criteria (write the number sentence, use symbols to do so, solve the problem accurately or show his or her thinking using pictures, numbers or words).	3 point Student meets most criteria (write the number sentence, use symbols to do so, solve the problem accurately or show his or her thinking using pictures, numbers or words).	4 point Student meets all criteria (write the number sentence, use symbols to do so, solve the problem accurately or show his or her thinking using pictures, numbers or words).

Rochester City School District Grade 1 Mathematics Performance Assessment Task 2 Rubric

Understand and apply properties of operations and the relationship between addition and subtraction.

- **1.OA.3** Apply properties of operations as strategies to add and subtract (commutative, associative).

Work with addition and subtraction equations.

- **1.OA.7** Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in This Task
<p>1 point Student is unable to determine whether the number sentence is true or false, explain his or her reasoning with pictures, numbers or words, or make the number sentence true in the event that it is originally false for any of the number sentences.</p>	<p>2 point Student has limited understanding of number sentences</p>	<p>3 point Student is able to apply properties to complete addition and subtraction number sentences and determine whether the number sentence is true or false with minor misconceptions</p>	<p>4 point Student is able to apply properties to complete addition and subtraction number sentences and determine whether the number sentence is true or false</p>

Rochester City School District Grade 1 Mathematics Performance Assessment Task 3 Rubric

Work with addition and subtraction equations.

- **1.OA.8** Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in This Task
<p>1 point Student accurately identifies and writes the unknown number for few of the number sentences.</p>	<p>2 point Student accurately identifies and writes the unknown number for some of the number sentences.</p>	<p>3 point Student accurately identifies and writes the unknown number for most of the number sentences.</p>	<p>4 point Student accurately identifies and writes the unknown number for all of the number sentences.</p>

Rochester City School District Grade 1 Mathematics Performance Assessment

Task 4 Rubric

Extend the Counting Sequence

- **1.NBT.1** Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.
- **1.NBT.3** Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in This Task
1 point Student accurately counts on from few of the numbers	2 point Student accurately counts on from some of the numbers	3 point Student accurately counts on from most of the numbers	4 point Student accurately counts on from all of the numbers
1 point Student is unable to accurately write any of the numbers	2 point Student accurately writes some of the numbers	3 point Student accurately writes most of the numbers	4 point Student accurately writes all of the numbers
1 point Student is unable to make an accurate comparison of numbers using the symbol card for any of the numbers	2 point Student makes one accurate comparison of numbers using the symbol card for any of the numbers	3 point Student makes two accurate comparisons of numbers using the symbol card for any of the numbers	4 point Student makes all accurate comparisons of numbers using the symbol card for any of the numbers

Rochester City School District Grade 1 Mathematics Performance Assessment Task 5 Rubric

Understand Place Value

- **1.NBT.2** Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:
 - 2a.** 10 can be thought of as a bundle of ten ones — called a “ten.”
 - 2c.** The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in This Task
1 point Student is unable to accurately identify the number of tens needed to make a number.	2 point Student accurately identifies some of the number of tens needed to make a number	3 point Student accurately identifies most of the number of tens needed to make a number	4 point Student accurately identifies all the number of tens needed to make a number
1 point Student is unable to accurately identify any of the numbers made by some tens and some ones	2 point Student accurately identifies some of the numbers made by some tens and some ones	3 point Student accurately identifies most of the numbers made by some tens and some ones	4 point Student accurately identifies all of the numbers made by some tens and some ones

Rochester City School District Grade 1 Mathematics Performance Assessment Task 6 Rubric

Understand Place Value

- **1.NBT.2** Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:
 - 2b.** The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in This Task
1 point Student is unable to accurately identify the number illustrated on any of the ten frames.	2 point Student accurately identifies the number illustrated on some of the ten frames.	3 point Student accurately identifies the number illustrated on most of the ten frames.	4 point Student accurately identifies the number illustrated on all of the ten frames.

Rochester City School District Grade 1 Mathematics Performance Assessment

Task 7 Rubric

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

- **1.NBT.4** Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, 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 and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
- **1.NBT.5** Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
- **1.NBT.6** Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), 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 and explain the reasoning used.

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in This Task
1 point Student accurately solves and shows work with blocks, drawings or words for very few or none of the problems.	2 point Student accurately solves and shows work with blocks, drawings or words for some of the problems.	3 point Student accurately solves and shows work with blocks, drawings or words for most of the problems.	4 point Student accurately solves and shows work with blocks, drawings or words for all of the problems.
1 point Student is unable to accurately identify “ten more than the number”	2 point Student accurately identifies “ten more than the number” for some of the given numbers	3 point Student accurately identifies “ten more than the number” for most of the given numbers	4 point Student accurately identifies “ten more than the number” for all of the given numbers

Rochester City School District Grade 1 Mathematics Performance Assessment Task 8 Rubric

Reason with shapes and their attributes.

- **1.G.1** Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in This Task
1 point Student is unable to accurately identify any triangles or identify attributes of triangles verses other shapes (3 sides, 3 corners/angles).	2 point Student accurately identifies some triangles but cannot identify the attributes of a triangle verses other shapes (3 sides, 3 corners/angles).	3 point Student accurately identifies some triangles and can identify the attributes of a triangle verses other shapes (3 sides, 3 corners/angles).	4 point Student accurately identifies all triangles and can identify the attributes of a triangle verses other shapes (3 sides, 3 corners/angles).

Rochester City School District Grade 1 Mathematics Performance Assessment Task 9 Rubric

Reason with shapes and their attributes.

- **1.G.2** Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. (Students do not need to learn formal names such as “right rectangular prism”)

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in This Task
1 point Student is unable to accurately build and describe a new shape, or is able to build only one new shape, with individual shapes and is unable to describe a new shape when built.	2 point Student accurately builds two separate but new shapes but is unable to put the two shapes together to build yet a third new shape. Student is unable to describe his or her new shapes.	3 point Student accurately builds all three new shapes but is unable to describe them.	4 point Student accurately builds and describes all three new shapes.

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Task 10 Rubric

Reason with shapes and their attributes.

- 1.G.3** Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in This Task
1 point Student is unable to accurately sort the halves and fourths.	<i>*Note having some halves in the "Halves" category, or some fourths in the "Fourths" category does not demonstrate understanding in this task; therefore, this task is scored on an all (4) or nothing (1) basis.</i>	<i>*Note having some halves in the "Halves" category, or some fourths in the "Fourths" category does not demonstrate understanding in this task; therefore, this task is scored on an all (4) or nothing (1) basis.</i>	4 point Student accurately sorts all of the halves and fourths.

Rochester City School District Grade 1 Mathematics Performance Assessment Task 11 Rubric

Measure lengths indirectly

- **1.MD.1** Order three objects by length; compare the lengths of two objects indirectly by using a third object.

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in This Task
1 point Student is unable to accurately place objects in order from shortest to longest.	2 point Student accurately places few of objects in order from shortest to longest.	3 point Student accurately places most of objects in order from shortest to longest.	4 point Student accurately places all of objects in order from shortest to longest.
1 point Student is unable to accurately identify the shorter and longer objects for of given sets.	2 point Student accurately identifies the shorter and longer objects for few of the given sets	3 point Student accurately identifies the shorter and longer objects for most of the given sets.	4 point Student accurately identifies the shorter and longer objects for all of the given sets.

Rochester City School District Grade 1 Mathematics Performance Assessment Task 12 Rubric

Measure lengths by iterating length units

- **1.MD.2** Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in This Task
1 point Student is unable to accurately complete any of the measurements	2 point Student accurately completes few of the measurements.	3 point Student accurately completes most of the measurements.	4 point Student accurately completes all of the measurements.

Rochester City School District Grade 1 Mathematics Performance Assessment Task 13 Rubric

Tell and write time

- **1.MD.3** Tell and write time in hours and half-hours using analog and digital clocks.

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in This Task
1 point Student is unable to accurately read or record time shown.	2 point Student is able to accurately read and record some of the given times shown	3 point Student is able to accurately read and record most of the given times shown	4 point Student is able to accurately read and record all of the given times shown

Rochester City School District Grade 1 Mathematics Performance Assessment Task 14 Rubric

Represent and interpret data

- **1.MD.4** Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

1 Student is Well Below Proficiency	2 Student is Partially Proficient	3 Student is Proficient	4 Student Excelled in This Task
1 point Student is unable to accurately organizes, represents and interprets data with up to three categories and may be able to ask and answer limited questions about the data points	2 point Student is able to accurately organizes, represents and interprets some data with up to three categories and may be able to ask and answer some questions about the data points	3 point Student is able to accurately organizes, represents and interprets most data with up to three categories and is able to ask and answer most questions about the data points	4 point Student is able to accurately organizes, represents and interprets all data with up to three categories and is able to ask and answer all questions about the data points