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

equations with a	a symbol for the unknown num	ber to represent the problem	
1	2	3	4
Student is Well	Student is Partially	Student is Proficient	Student Excelled in Task
Below Proficiency	Proficient		
1 point	2 point	3 point	4 point
Incorrectly solves entire	Equation is partially accurate.	Correctly solves the problem and attempts	Correctly solves the problem and
problem. No strategy	Explanation is non-existent.	to use a strategy such as making tens,	successfully uses a strategy such as
for solving problem is	Relies on counting as primary	create easier or known sums, and basic	making tens, creates easier or known
apparent.	strategy for solving problem.	facts. Equation is accurate but explanation	sums, and basic facts. Equation is
		is unclear.	accurate and explanation is clear
1 point	2 point	3 point	4 point
Incorrectly solves entire	Equation is partially accurate.	Correctly solves the problem and attempts	Correctly solves the problem and
problem. No	Explanation is non-existent.	to use a strategy such as making tens,	successfully uses a strategy such as
strategy for solving	Relies on counting as primary	create easier or known sums, and basic	making tens, creates easier or known
problem is apparent	strategy for solving problem.	facts. Equation is accurate but explanation	sums, and basic facts. Equation is
		is unclear.	accurate and explanation is clear
1 point	2 point	3 point	4 point
Incorrectly solves entire	Equation is partially accurate.	Correctly solves the problem and attempts	Correctly solves the problem and
problem. No	Explanation is non-existent.	to use a strategy such as making tens,	successfully uses a strategy such as
strategy for solving	Relies on counting as primary	create easier or known sums, and basic	making tens, creates easier or known
problem is apparent	strategy for solving problem.	facts. Equation is accurate but explanation	sums, and basic facts. Equation is
		is unclear.	accurate and explanation is clear
1 point	2 point	3 point	4 point
Incorrectly solves entire	Equation is partially accurate.	Correctly solves the problem and attempts	Correctly solves the problem and
problem. No	Explanation is non-existent.	to use a strategy such as making tens,	successfully uses a strategy such as
strategy for solving	Relies on counting as primary	create easier or known sums, and basic	making tens, creates easier or known
problem is apparent	strategy for solving problem.	facts. Equation is accurate but explanation	sums, and basic facts. Equation is
		is unclear.	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	2	3	4	
Student is Well Below	Student is Partially	Student is Proficient	Student Excelled in Task	
Proficiency	Proficient			
1 point	2 point	3 point	4 point	
Student does not create	Student is able to create	Student is able to create	Student successfully	
an array	one array but does not	two arrays but does not	creates two different	
	create a second array that	create a second array that	arrays.	
	is different.	is different.		
1 point	2 point	3 point	4 point	
Student's drawing(s) does	Student's drawing(s)	Student's drawing(s)	Student's drawings	
not represent array(s)	represents an array(s) but	accurately represents one	accurately represent s	
created.	not one created by the	of the arrays created.	both arrays created.	
	student.			
1 point	2 point	3 point	4 point	
Student is unable to write	Student's writes an	Student's writes one	Student writes two	
an equation indicating	equation(s) that does not	equation(s) that indicates	equations that indicate	
repeated groups.	indicate repeated groups.	repeated groups.	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	2	3	4
Student is Well Below	Student is Partially	Student is Proficient	Student Excelled in Task
Proficiency	Proficient		
1 point	2 point	3 point	4 point
Student correctly	Student correctly	Student correctly	Student correctly
completes few of the	completes some of the	completes most of the	completes all of the given
given skip counting	given skip counting	given skip counting	skip counting patterns
patterns	patterns	patterns	

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	2	3	4
Student is Well Below	Student is Partially	Student is Proficient	Student Excelled in Task
Proficiency	Proficient		
1 point	2 point	3 point	4 point
Student is able to correctly	Student is able to	Student is able to	Student is able to correctly
write few of the given	correctly write some of	correctly write most of	write all of the given numbers
numbers in standard form	the given numbers in	the given numbers in	in standard form
	standard form	standard form	
1 point	2 point	3 point	4 point
Student is able to correctly			
write few of the given	write some of the given	write most of the given	write all given numbers in
numbers in word form	numbers in word form	numbers in word form	word form
1 point	2 point	3 point	4 point
Student is able to correctly			
write few of the given	write some of the given	write most of the given	write all of the given
numbers in expanded	numbers in expanded	numbers in expanded	numbers in expanded
form	form	form	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
1 point	2 point	3 point	4 point
Student correctly	Student correctly	Student correctly	Student correctly
completes few of the	completes some of the	completes most questions	completes all questions
given questions and does	given questions and uses	and uses an appropriate	given and uses an
not use an appropriate	an appropriate	mathematical model.	appropriate mathematical
mathematical model	mathematical model.		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
1 point Student demonstrates little understanding of the task.	2 point Student has a minor computational error and cannot clearly demonstrate their process	3 point Student correctly answers the question and cannot clearly demonstrate their process OR student has a minor computational error and uses an appropriate strategy	4 point 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
1 point	2 point	3 point	4 point
Student can correctly	Student can correctly	Student can correctly	Student correctly
complete few questions	complete some questions	complete most questions	completes all questions
and does not use an	and uses an appropriate	and uses an appropriate	and uses an appropriate
appropriate mathematical	mathematical strategy.	mathematical strategy.	mathematical strategy.
strategy.			

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	2	3	4
Student is Well Below	Student is Partially	Student is Proficient	Student Excelled in Task
Proficiency	Proficient		
1 point	2 point	3 point	4 point
Student inconsistently	Student is able to add or	Student is able to add or	Student is able to add or
adds or subtracts ten more	subtract ten more or ten	subtract ten more or ten	subtract ten more or ten
or ten less to a given	less to some given	less to most given	less to any given number
number	numbers	numbers	
1 point	2 point	3 point	4 point
Student inconsistently adds	Student is able to add or	Student is able to add or	Student is able to add or
or subtracts 100 more or	subtracts 100 more or 100	subtracts 100 more or 100	subtracts 100 more or 100
100 less to a given number	less to some given numbers	less to most given numbers	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	2	3	4
Student is Well Below Student is Partially		Student is Proficient	Student Excelled in Task
Proficiency	Proficient		
1 point	2 point	3 point	4 point
Student is only able to	Student is able to add and	Student is able to add	Student is able to add and
add and subtract within	subtract within 20 using	and subtract within 20	subtract within 20 using
20 using mental	mental strategies	using mental strategies	mental strategies
strategies rarely	sometimes	most of the time	

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.

Sizes are compar	cu directly of visually, not compar	ed by measuring.	
1	2	3	4
Student is Well Below	Student is Partially	Student is Proficient	Student Excelled in Task
Proficiency	Proficient		
1 point	2 point	3 point	4 point
Student is able to	Student accurately	Student accurately identifies	Student accurately identifies
accurately identify 0-3 of	identifies 3-6 of 12 two-	6-9 of 12 two-dimensional and	all 12 two-dimensional and
the 12 two-dimensional	dimensional and three-	three-dimensional shapes.	three-dimensional shapes.
and 3-dimensional shapes.	dimensional shapes.		
1 point	2 point	3 point	4 point
Student accurately draws	Student accurately draws	Student accurately draws 3/4	Student accurately draws all
0 or 1/ 4 of the two-	2/4 of the two-	of the two-dimensional	four of the two-dimensional
dimensional shapes.	dimensional shapes.	shapes.	shapes.
1 point	2 point	3 point	1 point
Student is able to	Student is able to	Student is able to	Student is able to
accurately identify the	accurately identify the	accurately identify the	accurately identify the
number of sides of 1 of the	number of sides of 2 of the	number of sides of 3 of the	number of sides of 4 of the
two or three-dimensional	two or three-dimensional	two or three-dimensional	two or three-dimensional
shapes.	shapes.	shapes.	shapes.
1 point	2 point	3 point	4 point
Student is able to	Student is able to	Student is able to	Student is able to
accurately identify the	accurately identify the	accurately identify the	accurately identify the
number of corners of 1 of	number of corners of 2 of	number of corners of 3 of	number of corners of 4 of
the two or three-	the two or three-	the two or three-	the two or three-
dimensional shapes	dimensional shapes	dimensional shapes.	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	2	3	4
Student is Well Below	Student is Partially	Student is Proficient	Student Excelled in Task
Proficiency	Proficient		
1 point	2 points	3 points	4 points
Student is unable divide the	Student is able to divide	Student is able to divide	Student is able to divide
circles into equal shares	a circle into one of the	circles into two of the	circles into each of the
	equal shares	equal shares	equal shares
1 point	2 points	3 points	4 points
Student is unable divide the	Student is able divide	Student is able divide	Student is able divide the
rectangle into equal shares	the rectangle into one of	the rectangle into two of	rectangle into all three of
and cannot identify any of the	the equal shares and	the equal shares and	the equal shares and
fractional parts given.	correctly identifies one	correctly identifies two	correctly identifies all three
	the fractional parts given	of the fractional parts	of the fractional parts
		given.	given.
1 point	2 points	3 points	4 points
Student does not recognize	Student recognizes and	Student recognizes and	Student recognizes and
and cannot group the shapes	groups few shapes by	groups most shapes by	groups all shapes by
by identifying equal shares or	identifying that the	identifying that the	identifying that the wholes
fractional amounts.	wholes do not have the	wholes do not have the	do not have the same
	same shape but the	same shape but the	shape but the same
	same fractional amount	same fractional amount	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 \$\phi\$ 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
<u>1 point</u> Student	2 points The student's line plot	3 points Student completes the line	4 points Student accurately completes the
demonstrates little	contains multiple	plot with some minor	line plot.
or no understanding	errors. Student	errors.	
of line plots.	demonstrates limited		
	understanding of line plots.		
1 point	2 points	3 points	4 points
Student demonstrates little	The student is able to create a picture graph but	Student is able to complete a picture graph with some	Student is able to accurately complete a picture graph using a
or no understanding	it contains multiple errors.	minor errors. Student is	provided key. Student is able to
of picture graphs.	Student demonstrates limited understanding of	able to solve some simple	answer questions based on the
	picture graphs. Student is	put together, take apart	data correctly.
	unable to solve simple put	and compare problems	
	together, take apart and compare problems		