

# Fourth Grade SBRC Rubrics

1-Does Not Meet Standards

2-Approaching Standards

3-Meets Standards

E-Exceeds Standards

## Math

<b>1) Applies mathematical practices (MP.1-MP.8)</b>				
<b>Trimester</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>E</b>
<b>ALL</b> (MP.1-MP.8)	<b>Student has limited ability to:</b> -solve problems without giving up -think about words and numbers to solve problems -explain thinking orally -use math models to show work -choose correct math tools -use math vocabulary appropriately -use prior knowledge to solve new problems -look for rules and patterns to solve problems	<b>Student is developing ability to:</b> -solve problems without giving up -think about words and numbers to solve problems -explain thinking orally -use math models to show work -choose correct math tools -use math vocabulary appropriately -use prior knowledge to solve new problems -look for rules and patterns to solve problems	<b>Student is able to:</b> -solve problems without giving up -think about words and numbers to solve problems -explain thinking orally -use math models to show work -choose correct math tools -use math vocabulary appropriately -use prior knowledge to solve new problems -look for rules and patterns to solve problems	Student's ability to use a variety of strategies to solve problems exceeds standards .
<b>Assessment:</b> Math reasoning rubric, journals, CSA				

## Operations and Algebraic Thinking

2) Uses +, -, x, and ÷ with whole numbers to solve problems (4.OA.A1, 4.OA.A2, 4.OA.A3)				
Trimester	1	2	3	E
<b>ALL</b> (4.OA.A1- OA.A3)	<b>With consistent prompting and support</b> , student <b>has difficulty</b> using a provided addition, subtraction, multiplication, and division strategies to solve one-step and/or multi-step problems with multiple errors.	<b>With prompting and support</b> , student can use addition, subtraction, multiplication, and division strategies to solve one-step and/or multi-step problems.	Students can <b>consistently</b> use addition, subtraction, multiplication, and division strategies to accurately solve one-step and/or multi-step problems.	Student can <b>consistently and independently</b> use addition, subtraction, multiplication, and division strategies to accurately solve one-step and multi-step problems, and inverse operations to self-assess and correct when necessary.
<b>Assessment:</b>				

3) Gains familiarity with factors and multiples (4.OA.B4)				
Trimester	1	2	3	E
<b>ALL</b> (4.OA.B4)	<b>With consistent teacher support</b> , student <b>has difficulty</b> using a provided strategy to find some factor pairs for whole numbers in the range of 1-100, understanding that a whole number is a multiple of each of its factors, and in using a provided strategy to determine whether a given whole number in the range of 1-100 is a multiple of a given one-digit number.	<b>With prompting and support</b> , student can find some factor pairs for whole numbers in the range of 1-100, understand that a whole number is a multiple of each of its factors, and determine whether a given whole number in the range of 1-100 is a multiple of a given one-digit number.	Student can <b>consistently</b> find most factor pairs for whole numbers in the range of 1-100, understand that a whole number is a multiple of each of its factors, determine whether a given whole number in the range of 1-100 is a multiple of a given one-digit number, and determine if a given whole number within the range 1-100 is prime or composite.	Student can <b>consistently and independently</b> find all factor pairs for whole numbers in the range of 1-100, understand that a whole number is a multiple of each of its factors, determine whether a given whole number in the range of 1-100 is a multiple of a given one-digit number, and determine if a given whole number within the range 1-100 is prime or composite.
<b>Assessment:</b>				

**4) Generates and analyzes patterns (4.OA.C5)**

Ex: For the rule “Add 3” starting at 1, generate terms, observe that the terms alternate between odd and even numbers, and explain why.

Trimester	1	2	3	E
<b>ALL</b> (4.OA.C5)	<b>With consistent prompting and support, student has difficulty</b> generating and analyzing patterns.	<b>With prompting and support,</b> student can generate and analyze patterns.	Student can <b>consistently</b> generate and analyze patterns.	Students can consistently and independently analyze patterns.

**Assessment:**

**5) Demonstrates fluency for + and - with multi-digit numbers (4.NBT.B4)**

Trimester	1	2	3	E
<b>ALL</b> (4.NBT.B4)	<b>With consistent teacher support and/or visual aids,</b> student <b>has difficulty</b> adding and subtracting multi-digit whole numbers.	<b>With prompting and support,</b> student can add and subtract using the standard algorithm.	Student can <b>consistently</b> apply place value concepts in order to add and subtract using the standard algorithm.	Student can <b>consistently and independently</b> apply place value concepts in order to add and subtract multi-digit whole numbers using the standard algorithm and explain the process of regrouping within our place value system.

**Assessment:**

<b>6) Demonstrates fluency for <math>\div</math> and <math>\times</math> within 144 (0-12)</b>				
<b>Trimester</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>E</b>
<b>ALL</b>	Student is <b>not developing fluency</b> when dividing facts 1 to 12.  Student is <b>not developing fluency</b> when multiplying facts 0 to 12.	Student is <b>inconsistently</b> fluent when dividing facts 1 to 12.  Student is <b>inconsistently</b> fluent when multiplying facts 0 to 12.	Student <b>consistently</b> demonstrates <b>fluency within division facts</b> 1 to 12.  Student <b>consistently</b> demonstrates <b>fluency within multiplication facts</b> 0 to 12.	NA
<b>Assessment:</b>				

## Numbers and Operations Within Base 10

7) Applies place value understanding for multi-digit whole numbers (4.NBT.A1, 4.NBT.A2, 4.NBT.A3)				
Trimester	1	2	3	E
<b>ALL</b> (4.NBT.A1-NBT.A3)	<p><b>With consistent prompting and support</b>, as well as manipulatives, student has difficulty consistently recognizing the value of a given digit in multi-digit number.</p>	<p><b>With prompting and support</b>, student can recognize that in multi-digit numbers, a digit in one place represents ten times what it represents in the place to its right; read and write multi-digit whole numbers in standard, word, and expanded form; compare two multi-digit whole numbers using <math>&lt;</math>, <math>&gt;</math>, or <math>=</math>; round multi-digit whole numbers to any given place value.</p>	<p>Student can <b>consistently</b> recognize that in multi-digit whole numbers, a digit in one place represents ten times what it represents in the place to its right; read and write multi-digit whole numbers in standard, word and expanded form, most of the time; compare two multi-digit numbers using <math>&lt;</math>, <math>&gt;</math>, or <math>=</math>; round multi-digit numbers to any given place value, most of the time.</p>	<p>Student can <b>consistently and independently</b> recognize that in multi-digit whole numbers, a digit in one place represents ten times what it represents in the place to its right and explain why in his/her own words; read and write multi-digit whole numbers in standard, word and expanded form; compare two multi-digit numbers using <math>&lt;</math>, <math>&gt;</math>, or <math>=</math> and explain their relationship; round multi-digit numbers to any given place value and explain in his/her own words.</p>
<b>Assessment:</b>				

<b>8) Uses place value understanding and properties of operations to perform multi-digit arithmetic (4.NBT.B5, 4.NBT.B6)</b>				
<b>Trimester</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>E</b>
<b>ALL</b> (4.NBT.B5-NBT.B6)	<b>With consistent teacher support and/or visual aids,</b> student has difficulty multiplying four-digit by one-digit and two-digit by two-digit whole number, and in dividing up to four-digit dividends by a one-digit divisor.	<b>With prompting and support,</b> student can multiply four-digit by one-digit and two-digit by two-digit whole numbers and divide whole numbers up to four-digit dividends by a one-digit divisor.	Student can <b>consistently</b> multiply a four-digit by one-digit whole numbers and two-digit by two-digit whole numbers, and divide whole numbers up to four-digit dividends by a one-digit divisor.	Student can <b>consistently and independently</b> apply place value concepts in order to multiply up to four-digit by one-digit whole numbers and two-digit by two-digit whole numbers using a variety of strategies with explanations, and divide whole numbers up to four-digit dividends by a one-digit divisor using a variety of strategies with explanations.
<b>Assessment:</b>				

## Numbers and Operations- Fractions

9) Extends understanding of fraction equivalence and ordering (4.NF.A1, 4.NF.A2)				
Trimester	1	2	3	E
<b>ALL</b> (4.NF.A1-NF.A2)	<b>With consistent teacher support and/or visual aids,</b> student <b>has difficulty</b> identifying equivalent fractions and comparing fractions with like numerators or denominators, using $<$ , $>$ , or $=$ .	<b>With visual aids,</b> student can generate equivalent fractions, compare two fractions, with like or unlike denominators, using $<$ , $>$ , or $=$ by comparing the fraction to a benchmark fraction.	Student can <b>consistently</b> generate equivalent fractions using visual aids and explains his/her process; compares two fractions, with like or unlike denominators, using $<$ , $>$ or $=$ by creating common denominators and/or comparing the fraction to a benchmark fraction.	Student can <b>consistently and independently</b> generate equivalent fractions using a variety of strategies, and is able to explain his/her process. Student compares two fractions, with like or unlike denominators, using $<$ , $>$ or $=$ with a variety of strategies.
<b>Assessment:</b>				

10) Builds fractions from unit fractions by applying properties of operations on whole numbers (4.NF.B3, 4.NF.B4)				
Trimester	1	2	3	E
<b>ALL</b> (4.NF.B3-NF.B4)	<b>With consistent teacher support and/or visual aids,</b> student <b>has difficulty</b> solving mathematical problems involving the addition and subtraction of fractions with like denominators, decomposing a fraction into a sum of fractions with like denominators in multiple ways, and multiplying a fraction by a whole number.	<b>With prompting and support and/or visual aids,</b> student can solve mathematical problems involving the addition and subtraction of fractions with like denominators, decompose a fraction into a sum of fractions with like denominators in multiple ways, and multiply a fraction by a whole number.	Student can <b>consistently</b> solve mathematical problems involving the addition and subtraction of fractions with like denominators and decompose a fraction into a sum of fractions with like denominators in multiple ways. Student can multiply a fraction by a whole number and explain his/her thinking.	Student can <b>consistently and independently</b> solve mathematical problems involving the addition and subtraction of fractions and mixed numbers with like denominators, decompose a fraction into a sum of fractions with like denominators in multiple ways, and multiply a fraction by a whole number and explain his/her thinking.
<b>Assessment:</b>				

<b>11) Understands decimal notation for fractions, and compares decimal notation for fractions, and decimal fractions (4.NF.C5, 4.NF.C6, 4.NF.C7)</b>				
<b>Trimester</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>E</b>
<b>ALL</b> (4.NF.C5-NF.C7)	<b>With consistent teacher support and/or visual aids, student has difficulty</b> recognizing fractions with denominators of 10 and 100 as decimals.	<b>With prompting and support and/or visual aids,</b> student can recognize decimals as fractions with denominators of 10 and 100, and demonstrate this understanding by comparing decimals and fractions.	Student can <b>consistently</b> understand the relationship between fractions (with denominators of 10 and 100) and their decimal notations, and demonstrate this understanding by comparing decimals and fractions.	Student can <b>consistently and independently</b> understand the relationship between fractions (with denominators of 10 and 100) and their decimal notations, and demonstrate this understanding by comparing decimals and fractions.
<b>Assessment:</b>				

<b>12) Solves problems involving measurement and conversion of measurements from a larger unit to a smaller unit (4.MD.A1, 4.MD.A2, 4.MD.A3)</b>				
<b>Trimester</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>E</b>
<b>ALL</b> (4.MD.A1-MD.A3)	<b>With consistent prompting and support,</b> student <b>has difficulty</b> using all four operations to solve problems involving units of measurement and converting measurement units.	<b>With prompting and support,</b> student uses all four operations to solve problems involving units of measurement, and convert measurement units.	Student can <b>consistently</b> use all four operations to solve problems involving units of measurement, and convert measurement units.	Students can <b>consistently and independently</b> use all four operations to solve problems involving units of measurement, and convert measurement units.
<b>Assessment:</b>				

<b>13) Represents and interprets data (4.MD.B4)</b>				
<b>Trimester</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>E</b>
<b>ALL</b> (4.MD.B4)	<b>With consistent prompting and support,</b> student <b>has difficulty</b> visually representing collected data in fractions of a unit ( $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{8}$ ) using a line plot, and in using operations on fractions to solve problems involving information from a line plot.	<b>With prompting and support,</b> student can visually represent collected data in fractions of a unit ( $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{8}$ ) using a line plot to draw conclusions, compare data, analyze trends, make data-based predictions about future outcomes, and use operations on fractions to solve problems involving information from the line plot.	Student can <b>consistently</b> visually represent collected data in fractions of a unit ( $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{8}$ ) using a line plot to draw conclusions, compare data, analyze trends, make data-based predictions about future outcomes, and use operations on fractions to solve problems involving information from the line plot.	Student can <b>consistently and independently</b> visually represent collected data in fractions of a unit ( $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{8}$ ) using a line plot to draw conclusions, compare data, analyze trends, make data-based predictions about future outcomes, and use operations on fractions to solve problems involving information from the line plot.
<b>Assessment:</b>				

<b>14) Understands concepts of angles and measures angles (4.MD.C5, 4.MD.C6, 4.MD.C7)</b>				
<b>Trimester</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>E</b>
<b>ALL</b> (4.MD.C5-MD.C7)	<b>With consistent teacher support and/or visual aids,</b> student <b>has difficulty</b> demonstrating understanding of angles, angle measurement, and solving addition and subtraction problems to find the measure of unknown angles.	<b>With prompting and support,</b> student demonstrates an understanding of the concept of an angle and angle measurement, measures angles using a protractor, and solves addition and subtraction problems to find the measure of unknown angles.	Student can <b>consistently</b> demonstrate understanding of the concept of an angle and angle measurement, measures angles using a protractor, and solves addition and subtraction problems to find the measure of unknown angles.	Student can <b>consistently and independently</b> demonstrate understanding of the concept of an angle and angle measurement, measures angles using a protractor, and solves addition and subtraction problems to find the measure of unknown angles.
<b>Assessment:</b>				

# Geometry

<b>15) Draws, identifies and classifies lines and angles (4.G.A1, 4.G.A2, 4.G.A3)</b>				
<b>Trimester</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>E</b>
<b>ALL</b> (4.G.A1-G.A3)	<b>With consistent teacher support and/or visual aids,</b> student <b>has difficulty</b> drawing and identifying points, lines, line segments, rays, perpendicular lines, and parallel lines; drawing and identifying acute, obtuse, right, and straight angles; classifying shapes by properties of their lines and angles; and in recognizing and drawing lines of symmetry for two-dimensional figures.	<b>With prompting and support,</b> student can draw and identify points, lines, line segments, rays, perpendicular lines, and parallel lines; draw and identify acute, obtuse, right, and straight angles; classify shapes by properties of their lines and angles; and recognize and draw lines of symmetry for two-dimensional figures.	Student can <b>consistently</b> draw and identify points, lines, line segments, rays, perpendicular lines, and parallel lines; draw and identify acute, obtuse, right, and straight angles; classify shapes by properties of their lines and angles; and recognize and draw lines of symmetry for two-dimensional figures.	Student can <b>consistently and independently</b> draw and identify points, lines, line segments, rays, perpendicular lines, and parallel lines; draw and identify acute, obtuse, right, and straight angles; classify shapes by properties of their lines and angles; and recognize and draw lines of symmetry for two-dimensional figures.
<b>Assessment:</b>				