# Mathematics Grade 4

## Operations and Algebraic Thinking

### 1. Multiplies basic facts fluently (Standard: 4.OA.1; 4.OA.2)

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | Student demonstrates little or no understanding of:<br>· relating multiplication equations to multiplicative comparison | Student requires teacher prompting and support to:<br>· relate multiplication equations to multiplicative comparison | Student consistently and independently:<br>· relates multiplication equations to multiplicative comparison | "Meets Standards" and independently challenges him/herself, and makes insightful connections to other ideas and concepts when:<br>· relating multiplication equations to multiplicative comparison |
| 2 | Student demonstrates little or no understanding of:<br>· relating multiplication equations to multiplicative comparison | Student requires teacher prompting and support to:<br>· relate multiplication equations to multiplicative comparison | Student consistently and independently:<br>· relates multiplication equations to multiplicative comparison | "Meets Standards" and independently challenges him/herself, and makes insightful connections to other ideas and concepts when:<br>· relating multiplication equations to multiplicative comparison |
| 3 | Student demonstrates little or no understanding of:<br>· relating multiplication equations to multiplicative comparison | Student requires teacher prompting and support to:<br>· relate multiplication equations to multiplicative comparison | Student consistently and independently:<br>· relates multiplication equations to multiplicative comparison | "Meets Standards" and independently challenges him/herself, and makes insightful connections to other ideas and concepts when:<br>· relating multiplication equations to multiplicative comparison |

### 2. Divides basic facts fluently (Standard: 4.OA.2)

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| 1 | N/A | N/A | N/A | N/A |
| 2 | Student demonstrates little or no understanding of:<br>· relating division equations to multiplicative comparisons | Student demonstrates little or no understanding of:<br>· relating division equations to multiplicative comparisons | Student demonstrates little or no understanding of:<br>· relating division equations to multiplicative comparisons | "Meets Standards" and independently challenges him/herself, and makes insightful connections to other ideas and concepts when:<br>· relating division equations to multiplicative comparisons |
| 3 | Student demonstrates little or no understanding of:<br>· relating division equations to multiplicative comparisons | Student demonstrates little or no understanding of:<br>· relating division equations to multiplicative comparisons | Student demonstrates little or no understanding of:<br>· relating division equations to multiplicative comparisons | "Meets Standards" and independently challenges him/herself, and makes insightful connections to other ideas and concepts when:<br>· relating division equations to multiplicative comparisons |

**3. Uses the four operations to solve multistep word problems (Standards: 4.OA.2; 4.OA.3)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | N/A | | | |

| | | | | |
|---|---|---|---|---|
| 2 | Student demonstrates little or no understanding of:<br><br>-distinguishing multiplicative comparisons from additive comparisons<br><br>-dividing to solve word problems involving multiplicative comparison<br><br>-solving multi-step word problems<br><br>-assessing the reasonableness of answers to multi-step word problems<br><br>-using algebraic equations to represent multi-step word problems | Student requires teacher prompting and support to:<br><br>-distinguish multiplicative comparisons from additive comparisons<br><br>-divide to solve word problems involving multiplicative comparison<br><br>-solve multi-step word problems<br><br>-assess the reasonableness of answers to multi-step word problems<br><br>-use algebraic equations to represent multi-step word problems | Student consistently and independently:<br><br>-distinguishes multiplicative comparisons from additive comparisons<br><br>-divides to solve word problems involving multiplicative comparison<br><br>-solves multi-step word problems<br><br>-assesses the reasonableness of answers to multi-step word problems<br><br>-uses algebraic equations to represent multi-step word problems | "Meets Standards" and independently challenges him/herself, and makes insightful connections to other ideas and concepts when:<br><br>-distinguishing multiplicative comparisons from additive comparisons<br><br>-dividing to solve word problems involving multiplicative comparison<br><br>-solving multi-step word problems<br><br>-assessing the reasonableness of answers to multi-step word problems<br><br>-using algebraic equations to represent multi-step word problems |
| 3 | N/A | N/A | N/A | N/A |

**4. Finds factor pairs and recognizes multiples (Standard: 4.OA.4)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | N/A | N/A | N/A | N/A |

| | | | | |
|---|---|---|---|---|
| 2 | Student demonstrates little or no understanding of:<br>· finding factor pairs<br>· recognizing that a whole number is a multiple of each of its factors<br>· determining whether one number is a multiple of another<br>· identifying prime or composite numbers | Student requires teacher prompting and support to:<br>· find factor pairs<br>· recognize that a whole number is a multiple of each of its factors<br>· determine whether one number is a multiple of another<br>identify prime or composite numbers | Student consistently and independently:<br>· finds factor pairs<br>· recognizes that a whole number is a multiple of each of its factors<br>· determines whether one number is a multiple of another<br>identifies prime or composite numbers | Meets Standards" and independently challenges him/herself, and makes insightful connections to other ideas and concepts when:<br>· finding factor pairs<br>· recognizing that a whole number is a multiple of each of its factors<br>· determining whether one number is a multiple of another<br>· identifying prime or composite numbers |
| 3 | N/A | N/A | N/A | N/A |

**5. Generates and analyzes patterns (Standard: 4.OA.5)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | N/A | N/A | N/A | N/A |
| 2 | N/A | N/A | N/A | N/A |
| 3 | Student demonstrates little or no understanding of:<br><br>-generating a number pattern that follows a given rule<br><br>-generating a shape pattern that follows a given rule | Student requires teacher prompting and support to:<br><br>-generate a number pattern that follows a given rule<br><br>-generate a shape pattern that follows a given rule | Student consistently and independently:<br><br>-generates a number pattern that follows a given rule<br><br>-generates a shape pattern that follows a given rule | "Meets Standards" and independently challenges him/herself, and makes insightful connections to other ideas and concepts when:<br>-generating a number pattern that follows a given rule<br><br>-generates a shape pattern that follows a given rule |

**Number and Operations in Base Ten**

**1. Reads, writes and identifies place value for multi-digit whole numbers (Standards: 4.NBT.1; 4.NBT.2; 4.NBT.3)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | Student demonstrates little or no understanding of:<br><br>recognizing that a digit in one place represents ten times what it represents in the place to its right<br><br>reading and writing base- ten numerals for multi- digit numbers<br><br>reading and writing names for multi-digit numbers<br><br>using expanded form for multi-digit numbers<br><br>comparing two multi-digit numbers and use the symbols >, =, and <<br><br>rounding multi-digit whole numbers to any place | Student requires teacher prompting and support to:<br><br>recognize that a digit in one place represents ten times what it represents in the place to its right<br><br>read and write base-ten numerals for multi-digit numbers<br><br>read and write names for multi-digit numbers<br><br>use expanded form for multi-digit numbers<br><br>compare two multi-digit numbers and use the symbols >, =, and <<br><br>round multi-digit whole numbers to any place | Student consistently and independently:<br><br>recognizes that a digit in one place represents ten times what it represents in the place to its right<br><br>reads and writes base-ten numerals for multi-digit numbers<br><br>reads and writes names for multi-digit numbers<br><br>uses expanded form for multi-digit numbers<br><br>compares two multi-digit numbers and use the symbols >, =, and <<br><br>rounds multi-digit whole numbers to any place | "Meets Standards" and independently challenges him/herself, and makes insightful connections to other ideas and concepts when:<br><br>recognizing that a digit in one place represents ten times what it represents in the place to its right<br><br>reading and writing base- ten numerals for multi-digit numbers<br><br>reading and writing names for multi-digit numbers<br><br>using expanded form for multi-digit numbers<br><br>comparing two multi-digit numbers and use the symbols >, =, and <<br><br>rounding multi-digit whole numbers to any place |
| 2 | N/A | N/A | N/A | N/A |
| 3 | N/A | N/A | N/A | N/A |

**2. Adds and subtracts multi-digit whole numbers with accuracy and fluency (Standard: 4.NBT.4)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| 1 | Student demonstrates little or no understanding of:<br><br>fluently adding multi-digit whole numbers using the standard algorithm<br><br>fluently subtracting multi-digit whole numbers using the standard algorithm | Student requires teacher prompting and support to:<br><br>fluently add multi-digit whole numbers using the standard algorithm<br><br>fluently subtract multi-digit whole numbers using the standard algorithm | Student consistently and independently:<br><br>adds multi-digit whole numbers using the standard algorithm with fluency<br><br>subtracts multi-digit whole numbers using the standard algorithm with fluency | "Meets Standards" and independently challenges him/herself, and makes insightful connections to other ideas and concepts when:<br><br>fluently adding multi-digit whole numbers using the standard algorithm<br><br>fluently subtracting multi- digit whole numbers using the standard algorithm |
| 2 | N/A | N/A | N/A | N/A |
| 3 | N/A | N/A | N/A | N/A |

**3. Uses place value understanding and properties of operations to perform multi-digit multiplication with whole numbers (Standards: 4.NBT.5)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | Student demonstrates little or no understanding of:<br><br>multiplying up to a four-digit number by a one- digit number<br><br>multiplying two two-digit numbers<br><br>modeling multi-digit multiplication | Student requires teacher prompting and support to:<br><br>multiply up to a four-digit number by a one-digit number<br><br>multiply two two-digit numbers<br><br>model multi-digit multiplication | Student consistently and independently:<br><br>multiplies up to a four-digit number by a one-digit number<br><br>multiplies two two-digit numbers<br><br>models multi-digit multiplication | "Meets Standards" and independently challenges him/herself, and makes insightful connections to other ideas and concepts when:<br><br>multiplying up to a four- digit number by a one-digit number |

| | | | | |
|---|---|---|---|---|
| 2 | Student demonstrates little or no understanding of:<br><br>multiplying up to a four-digit number by a one- digit number<br><br>multiplying two two-digit numbers<br><br>modeling multi-digit multiplication | Student requires teacher prompting and support to:<br><br>multiply up to a four-digit number by a one-digit number<br><br>multiply two two-digit numbers<br><br>model multi-digit multiplication | Student consistently and independently:<br><br>multiplies up to a four-digit number by a one-digit number<br><br>multiplies two two-digit numbers<br><br>models multi-digit multiplication | "Meets Standards" and independently challenges him/herself, and makes insightful connections to other ideas and concepts when:<br><br>multiplying up to a four- digit number by a one-digit number |
| 3 | N/A | N/A | N/A | N/A |

**4. Uses place value understanding and properties of operations to accurately solve long division problems with one-digit divisors (Standards: 4.NBT.6)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | N/A | N/A | N/A | N/A |
| 2 | Student demonstrates little or no understanding of:<br><br>dividing up to four digit dividends by 1-digit divisors<br><br>modeling division of up to four-digit dividends by one-digit divisors | Student requires teacher prompting and support to:<br><br>divide up to four digit dividends by 1-digit divisors<br><br>model division of up to four-digit dividends by one-digit divisors | Student consistently and independently:<br><br>divides up to four digit dividends by 1-digit divisors<br><br>models division of up to four-digit dividends by one-digit divisors | "Meets Standards" and independently challenges him/herself, and makes insightful connections to other ideas and concepts when:<br><br>dividing up to four digit dividends by 1-digit divisors<br>modeling division of up to four-digit dividends by one-digit divisors |
| 3 | N/A | N/A | N/A | N/A |

**Number and Operations – Fractions**

**1. Recognizes and generates equivalent fractions; Compare and order fractions (Standards: 4.NF.1; 4.NF.2)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | N/A | N/A | N/A | N/A |
| 2 | Student demonstrates little or no understanding of:<br><br>explaining why a fraction a/b is equivalent to a fraction (n x a)/(n x b)<br><br>recognizing and generating equivalent fractions<br><br>compares two fractions with different numerators and different denominators and use the symbols >, =, or < | Student requires teacher prompting and support to:<br><br>explain why a fraction a/b is equivalent to a fraction (n x a)/(n x b)<br><br>recognize and generate equivalent fractions<br><br>compares two fractions with different numerators and different denominators and use the symbols >, =, or < | Student consistently and independently:<br><br>explains why a fraction a/b is equivalent to a fraction (n x a)/(n x b)<br><br>recognizes and generates equivalent fractions<br><br>compares two fractions with different numerators and different denominators and use the symbols >, =, or < | "Meets Standards" and independently challenges him/herself, and makes insightful connections to other ideas and concepts when:<br><br>explaining why a fraction a/b is equivalent to a fraction (n x a)/(n x b)<br><br>recognizing and generating equivalent fractions<br><br>compares two fractions with different numerators and different denominators and use the symbols >, =, or < |
| 3 | N/A | N/A | N/A | N/A |

**2. Adds and subtracts fractions and mixed numbers with like denominators (Standards: 4.NF.3)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | N/A | N/A | N/A | N/A |

| | | | | |
|---|---|---|---|---|
| 2 | Student demonstrates little or no understanding of:<br>understands a fraction a/b with a > 1 as a sum of fractions 1/b<br><br>interprets addition and subtraction of fractions<br><br>decomposes fractions<br><br>adds & subtracts mixed numbers with like denominators<br><br>solves word problems involving addition & subtraction of fractions with like denominators | Student requires teacher prompting and support to:"<br>understands a fraction a/b with a > 1 as a sum of fractions 1/b<br><br>interprets addition and subtraction of fractions"<br><br>decomposes fractions<br><br>adds & subtracts mixed numbers with like denominators<br><br>solves word problems involving addition & subtraction of fractions with like denominators | Student consistently and independently: understands a fraction a/b with a > 1 as a sum of fractions 1/b<br><br>interprets addition and subtraction of fractions<br><br>decomposes fractions<br><br>adds & subtracts mixed numbers with like denominators<br><br>solves word problems involving addition & subtraction of fractions with like denominators | “Meets Standards” and independently challenges him/herself, and makes "insightful connections to other ideas and concepts when:<br><br>understands a fraction a/b with a > 1 as a sum of fractions 1/b<br><br>interprets addition and subtraction of fractions<br><br>decomposes fractions<br><br>adds & subtracts mixed numbers with like denominators<br><br>solves word problems involving addition & subtraction of fractions with like denominators |
| 3 | N/A | N/A | N/A | N/A |

**3. Multiplies fractions by whole numbers (Standard 4.NF.4)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | N/A | N/A | N/A | N/A |
| 2 | N/A | N/A | N/A | N/A |

| | | | | |
|---|---|---|---|---|
| 3 | Student demonstrates little or no understanding of:<br>multiplies a fraction by a whole number<br><br>understands a fraction a/b as a multiple of 1/b<br><br>understands that n x (a/b) = (n x a)/b<br><br>solves word problems involving multiplication of a fraction by a whole number | Student requires teacher prompting and support to:<br>"multiplies a fraction by a whole number"<br><br>understands a fraction a/b as a multiple of 1/b<br><br>understands that n x (a/b) = (n x a)/b<br><br>solves word problems involving multiplication of a fraction by a whole number | Student consistently and independently: "multiplies a fraction by a whole number"<br><br>understands a fraction a/b as a multiple of 1/b<br><br>understands that n x (a/b) = (n x a)/b<br><br>solves word problems involving multiplication of a fraction by a whole number | “Meets Standards” and independently challenges him/herself, and makes "multiplies a fraction by a whole number"<br><br>understands a fraction a/b as a multiple of 1/b<br><br>understands that n x (a/b) = (n x a)/b<br><br>solves word problems involving multiplication of a fraction by a whole number |

**4. Shows understanding of the relationship between fractions and decimals (Standards: 4.NF.5; 4.NF.6; 4.NF.7).**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | N/A | N/A | N/A | N/A |
| 2 | N/A | N/A | N/A | N/A |

| | | | | |
|---|---|---|---|---|
| 3 | Student demonstrates little or no understanding of expressing a fraction with denominator 10 as an equivalent fraction with denominator 100<br><br>using equivalent fractions to add two fractions with respective denominators of 10 and 100<br><br>little or no understanding of using decimal notation for fractions with denominators 10 or 100<br><br>using decimal notation to describe length<br><br>showing decimals on a number line<br><br>comparing two decimals to hundredths and use the symbols >, =, or < | Student requires teacher prompting and support to: express a fraction with denominator 10 as an equivalent fraction with denominator 100<br><br>use equivalent fractions to add two fractions with respective denominators of 10 and 100<br><br>use decimal notation for fractions with denominators 10 or 100<br><br>use decimal notation to describe length<br><br>show decimals on a number line<br><br>compare two decimals to hundredths and use the symbols >, =, or < | Student consistently and independently: expresses a fraction with denominator 10 as an equivalent fraction with denominator 100<br><br>uses equivalent fractions to add two fractions with respective denominators of 10 and 100<br><br>uses decimal notation for fractions with denominators 10 or 100<br><br>uses decimal notation to describe length<br><br>shows decimals on a number line<br><br>compares two decimals to hundredths and use the symbols >, =, or < | “Meets Standards” and independently challenges him/herself, and makes insightful connections to other ideas and concepts when:<br><br>expressing a fraction with denominator 10 as an equivalent fraction with denominator 100<br><br>using equivalent fractions to add two fractions with respective denominators of 10 and 100<br><br>using decimal notation for fractions with denominators 10 or 100<br><br>using decimal notation to describe length<br><br>showing decimals on a number line<br><br>comparing two decimals to hundredths and use the symbols >, =, or < |

**Measurement**

Converts units of measures (Standard: 4.M.1)

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | N/A | N/A | N/A | N/A |
| 2 | N/A | N/A | N/A | N/A |

| | | | | |
|---|---|---|---|---|
| 3 | Student demonstrates little or no understanding of:<br><br>relative sizes of measurement units within one system of units<br><br>relative sizes of units of length<br><br>relative sizes of units of mass<br><br>relative sizes of units of weight<br><br>relative sizes of units of liquid volume<br><br>relative sizes of units of time<br><br>converting from larger units to smaller units<br><br>making a table of measurement equivalents | Student requires teacher prompting and support to:<br><br>know relative sizes of measurement units within one system of units<br><br>know relative sizes of units of length<br><br>know relative sizes of units of mass<br><br>know relative sizes of units of weight<br><br>know relative sizes of units of liquid volume<br><br>know relative sizes of units of time<br><br>convert from larger units to smaller units<br><br>make a table of measurement equivalents | Student consistently and independently:<br><br>knows relative sizes of measurement units within one system of units<br><br>knows relative sizes of units of length<br><br>knows relative sizes of units of mass<br><br>knows relative sizes of units of weight<br><br>knows relative sizes of units of liquid volume<br><br>knows relative sizes of units of time<br><br>converts from larger units to smaller units<br><br>makes a table of measurement equivalents | "Meets Standards" and independently challenges him/herself, and makes insightful connections to other ideas and concepts when:<br><br>knowing relative sizes of measurement units within one system of units<br><br>knowing relative sizes of units of length<br><br>knowing relative sizes of units of mass<br><br>knowing relative sizes of units of weight<br><br>knowing relative sizes of units of liquid volume<br><br>knowing relative sizes of units of time<br><br>converting from larger units to smaller units<br><br>making a table of measurement equivalents |
| | | | | |
| | | | | |
| **2. Solves problems involving measurement (Standards: 4.M.2; 4.M.3)** | | | | |
| **Trimester** | **Needs Support** | **Approaching Standards** | **Meets Standards** | **Exceeds Standards** |

| | | | | |
|---|---|---|---|---|
| 1 | N/A | N/A | N/A | N/A |
| 2 | N/A | N/A | N/A | N/A |

| | | | | |
|---|---|---|---|---|
| 3 | Student demonstrates little or no understanding of: solving word problems involving distances<br><br>solving word problems involving intervals of time<br><br>solving word problems involving liquid volumes<br><br>solving word problems involving masses of objects<br><br>solving word problems involving money<br><br>using the four operations to solve measurement word problems involving simple fractions<br><br>representing measurement quantities on number line diagrams<br><br>using the area formula for rectangles<br><br>using the perimeter formula for rectangles | Student requires teacher prompting and support to: solve word problems involving distances<br><br>solve word problems involving intervals of time<br><br>solve word problems involving liquid volumes<br><br>solve word problems involving masses of objects<br><br>solve word problems involving money<br><br>use the four operations to solve measurement word problems involving simple fractions<br><br>represent measurement quantities on number line diagrams<br><br>use the area formula for rectangles<br><br>use the perimeter formula for rectangles | Student consistently and independently: "solves word problems involving distances<br><br>solves word problems involving intervals of time<br><br>solves word problems involving liquid volumes<br><br>solves word problems involving masses of objects<br><br>solves word problems involving money<br><br>uses the four operations to solve measurement word problems involving simple fractions<br><br>represents measurement quantities on number line diagrams<br><br>uses the area formula for rectangles<br><br>uses the perimeter formula for rectangles | “Meets Standards” and independently challenges him/herself, and makes insightful connections to other ideas and concepts when:<br><br>solving word problems involving distances<br><br>solving word problems involving intervals of time<br><br>solving word problems involving liquid volumes<br><br>solving word problems involving masses of objects<br><br>solving word problems involving money<br><br>using the four operations to solve measurement word problems involving simple fractions<br><br>representing measurement quantities on number line diagrams<br><br>using the area formula for rectangles<br><br>using the perimeter formula for rectangles |

**3. Measures angles using a protractor (Standards: 4.M.5; 4.M.6)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | N/A | N/A | N/A | N/A |
| 2 | N/A | N/A | N/A | N/A |
| 3 | Student demonstrates little or no understanding of:<br><br>how angles are formed<br><br>concepts of angle measurement<br><br>relating angle measurement in degrees to circles<br><br>relating one-degree angles to n-degree angles<br><br>measuring angles using a protractor<br><br>sketching angles of specified measure "recognizes angle measure as additive<br><br>solves addition and subtraction problems to find unknown angles on a diagram | Student requires teacher prompting and support to:<br><br>understand how angles are formed<br><br>understand concepts of angle measurement<br><br>relate angle measurement in degrees to circles<br><br>relate one-degree angles to n-degree angles<br><br>measure angles using a protractor<br><br>sketch angles of specified measure "recognizes angle measure as additive<br><br>solves addition and subtraction problems to find unknown angles on a diagram | Student consistently and independently:<br><br>understands how angles are formed<br><br>understands concepts of angle measurement<br><br>relates angle measurement in degrees to circles<br><br>relates one-degree angles to n-degree angles measures angles using a protractor<br><br>sketch angles of specified measure<br><br>recognizes angle measure as additive solves addition and subtraction problems to find unknown angles on a diagram | "Meets Standards" and independently challenges him/herself, and makes insightful connections to other ideas and concepts when:<br><br>understanding how angles are formed<br><br>understanding concepts of angle measurement<br><br>relating angle measurement in degrees to circles<br><br>relating one-degree angles to n-degree angles<br><br>measuring angles using a protractor sketching angles of specified measure<br><br>recognizes angle measure as additive<br><br>solves addition and subtraction problems to find unknown angles on a diagram |

**Data Literacy**

**1. Represents and interprets data (Standard: 4.DL.3; 4.DL.4; 4.DL.5)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | N/A | N/A | N/A | N/A |
| 2 | N/A | N/A | N/A | N/A |
| 3 | Student demonstrates little or no understanding of: solving problems involving addition and subtraction of fractions by using measurement data in line plots<br><br>making a line plot to display measurements involving halves, fourths, eighths of a unit | Student requires teacher prompting and support to: solve problems involving addition and subtraction of fractions by using measurement data in line plots<br><br>make a line plot to display measurements involving halves, fourths, eighths of a unit | Student consistently and independently: solves problems involving addition and subtraction of fractions by using measurement data in line plots<br><br>makes a line plot to display measurements involving halves, fourths, eighths of a unit | "Meets Standards" and independently challenges him/herself, and makes insightful connections to other ideas and concepts when:<br><br>solving problems involving addition and subtraction of fractions by using measurement data in line plots<br><br>making a line plot to display measurements involving halves, fourths, eighths of a unit |

**Geometry**

**1. Draws and identifies lines and angles / Classifies shapes based on lines and angles (Standards: 4.G.1; 4.G.2; 4.G.3)**

| Trimester | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| 1 | N/A | N/A | N/A | N/A |
| 2 | N/A | N/A | N/A | N/A |

| | | | | |
|---|---|---|---|---|
| 3 | Student demonstrates little or no understanding of:<br><br>drawing and identifying points, lines, line segments, and rays<br><br>drawing and identifying parallel and perpendicular lines<br><br>drawing and identifying angles drawing and identifying right, acute, and obtuse angles<br><br>uses parallel or perpendicular lines to classify figures<br><br>uses angle measure to classify figures<br><br>categorizes and identifies right triangles<br><br>understands, identifies, and draws lines symmetry | Student requires teacher prompting and support to:<br><br>draw and identify points, lines, line segments, and rays<br><br>draw and identify parallel and perpendicular lines<br><br>draw and identify angles<br><br>draw and identify right, acute, and obtuse angles uses parallel or perpendicular lines to classify figures<br><br>uses angle measure to classify figures<br><br>categorizes and identifies right triangle<br><br>understands, identifies, and draws lines symmetry | Student consistently and independently:<br><br>draws and identifies points, lines, line segments, and rays<br><br>draws and identifies parallel and perpendicular lines<br><br>draws and identifies angles<br>draws and identifies right, acute, and obtuse angles<br><br>uses parallel or perpendicular lines to classify figures<br><br>uses angle measure to classify figures<br><br>categorizes and identifies right triangles<br><br>understands, identifies, and draws lines symmetry" | "Meets Standards" and independently challenges him/herself, and makes insightful connections to other ideas and concepts when:<br><br>drawing and identifying points, lines, line segments, and rays<br>drawing and identifying parallel and perpendicular lines<br><br>drawing and identifying angles<br><br>drawing and identifying right, acute, and obtuse angle<br><br>uses parallel or perpendicular lines to classify figures<br><br>uses angle measure to classify figures<br><br>categorizes and identifies right triangles<br><br>understands, identifies, and draws lines symmetry |
| | | | | |
| **<u>Mathematical Practices</u>** | | | | |
| **1. Makes sense of problems and perseveres in solving them** | | | | |
| **Trimester** | **Needs Support** | **Approaching Standards** | **Meets Standards** | **Exceeds Standards** |

| | | | | |
|---|---|---|---|---|
| All | When given a problem, student is unable to:<br><br>Make a plan and apply strategies to solve the problem, determine if it makes sense, and check their work. | When given a problem, a student, with prompting and guidance, is sometimes able to:<br><br>Make a plan and apply strategies to solve the problem, determine if it makes sense, and check their work. | When given a problem, a student is consistently able to:<br><br>Make a plan and apply strategies to solve the problem, determine if it makes sense, and check their work. | When given a problem, a student is consistently able to:<br><br>Make a plan and apply strategies to solve the problem, determine if it makes sense, and check their work.<br><br>The student can also persevere to solve the problem accurately, and suggest at least one other way to solve the problem. |

2. **Reasons abstractly and quantitatively**

| **Trimester** | **Needs Support** | **Approaching Standards** | **Meets Standards** | **Exceeds Standards** |
|---|---|---|---|---|
| All | Student is unable or rarely able to:<br><br>select effective strategy<br><br>identify appropriate operations<br><br>mathematically compute the correct answer | Student sometimes:<br><br>selects effective strategy<br><br>identifies appropriate operations<br><br>mathematically computes the correct answer | Student consistently:<br><br>selects effective strategy<br><br>identifies appropriate operations<br><br>mathematically computes the correct answer | Student consistently:<br><br>interprets the task and applies appropriate operations<br><br>computes accurately on more complex problems<br><br>makes connections to other mathematical ideas or contexts |

**3. Constructs viable mathematical arguments**

| **Trimester** | **Needs Support** | **Approaching Standards** | **Meets Standards** | **Exceeds Standards** |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| All | Student is unable or rarely able to:<br><br>communicate mathematical thinking with accurate vocabulary; communicate logical arguments that follow a clear and coherent path throughout the problem | Student sometimes but not consistently:<br><br>communicates all mathematical thinking with accurate vocabulary; communicates logical arguments that follow a clear and coherent path throughout the problem | Student consistently:<br><br>communicates all mathematical thinking with accurate vocabulary; communicates logical arguments that follow a clear and coherent path throughout the problem | Student consistently:<br><br>communicates all mathematical thinking precisely and with accurate vocabulary; communicates logical arguments clearly in oral, written, and/or graphic form to show why a result makes sense |
| | | | | |
| **4. Models with mathematics** | | | | |
| **Trimester** | **Needs Support** | **Approaching Standards** | **Meets Standards** | **Exceeds Standards** |
| All | Student is unable or rarely able to:<br><br>use representations that are effective<br><br>use appropriate representations that are complete | Student sometimes:<br><br>uses representations that are effective<br><br>uses appropriate representations that are complete | Student consistently:<br><br>uses representations that are effective<br><br>uses appropriate representations that are complete | Student consistently:<br><br>uses representations that are both elegant and insightful<br><br>uses appropriate representations on more complex problems |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| **Science Grade 4** | | | | |
| | | | | |
| **Trimester One** | | | | |
| **Topics** | **Needs Support** | **Approaching Standards** | **Meets Standards** | **Exceeds Standards** |

| | | | | |
|---|---|---|---|---|
| Changing Earth | -Student has not demonstrated an adequate understanding of the content and is still developing the required skills. | -Student has demonstrated understanding of the content and can practice the skills with prompting or assistance. | -Student has demonstrated understanding of the content and can practice the skills independently. | -Student has clearly demonstrated understanding of the content, independently demonstrated the skills being taught and has made connections to the content in unexpected or non-routine ways. |
| | -Student has not demonstrated an adequate ability to compose open-ended responses. | -Student has demonstrated understanding of open-ended responses, which may lack necessary detail. May need prompting and support. | -Student has demonstrated the ability to compose detailed and proficient open-ended responses. | -Student has clearly demonstrated the ability to compose insightful and detailed open-ended responses. |
| | -Student has not demonstrated an adequate ability to support understanding through modeling (using measuring and/or graphing) and/or investigation. | -Student needs prompting and support to demonstrate an adequate understanding through modeling (using measuring and/or graphing) and/or investigation. | -Student is able to thoroughly and accurately demonstrate understanding through modeling and/or investigation. | -Student's ideas for modeling and investigating are insightful, engaging, and advanced. |
| | | | | |
| | | | | |
| **Trimester Two** | | | | |

| **Topics** | **Needs Support** | **Approaching Standards** | **Meets Standards** | **Exceeds Standards** |
|---|---|---|---|---|
| Energy | -Student has not demonstrated an adequate understanding of the content and is still developing the required skills. | -Student has demonstrated understanding of the content and can practice the skills with prompting or assistance. | -Student has demonstrated understanding of the content and can practice the skills independently. | -Student has clearly demonstrated understanding of the content, independently demonstrated the skills being taught and has made connections to the content in unexpected or non-routine ways. |
| | -Student has not demonstrated an adequate ability to compose open-ended responses. | -Student has demonstrated understanding of open-ended responses, which may lack necessary detail. May need prompting and support. | -Student has demonstrated the ability to compose detailed and proficient open-ended responses. | -Student has clearly demonstrated the ability to compose insightful and detailed open-ended responses. |
| Waves and Information | -Student has not demonstrated an adequate ability to support understanding through modeling (using measuring and/or graphing) and/or investigation. | -Student needs prompting and support to demonstrate an adequate understanding through modeling (using measuring and/or graphing) and/or investigation. | -Student is able to thoroughly and accurately demonstrate understanding through modeling and/or investigation. | -Student's ideas for modeling and investigating are insightful, engaging, and advanced. |
| | | | | |
| | | | | |
| **Trimester Three** | | | | |

| Topics | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| Earth and Human Activity | -Student has not demonstrated an adequate understanding of the content and is still developing the required skills. | -Student has demonstrated understanding of the content and can practice the skills with prompting or assistance. | -Student has demonstrated understanding of the content and can practice the skills independently. | -Student has clearly demonstrated understanding of the content, independently demonstrated the skills being taught and has made connections to the content in unexpected or non-routine ways. |
| | -Student has not demonstrated an adequate ability to compose open-ended responses. | -Student has demonstrated understanding of open-ended responses, which may lack necessary detail. May need prompting and support. | -Student has demonstrated the ability to compose detailed and proficient open-ended responses. | -Student has clearly demonstrated the ability to compose insightful and detailed open-ended responses. |
| From Molecules to Organisms: Structures and Processes | -Student has not demonstrated an adequate ability to support understanding through modeling (using measuring and/or graphing) and/or investigation. | -Student needs prompting and support to demonstrate an adequate understanding through modeling (using measuring and/or graphing) and/or investigation. | -Student is able to thoroughly and accurately demonstrate understanding through modeling and/or investigation. | -Student's ideas for modeling and investigating are insightful, engaging, and advanced. |

**Science Inquiry and Engineering- All Trimesters**

| | Needs Support | Approaching Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| | -Student is unable, even with prompting to: | -With prompting and support student is able to: | -Student is able to consistently: | -Student meets all criteria for "Meets Standards" and independently challenges him/herself, and makes insightful connections to other ideas and concepts when: |
| | -Utilize scientific inquiry by engaging in activities that lead to an understanding of scientific concepts.<br>-Construct arguments which support scientific concepts based on evidence<br>-Apply scientific concepts to real world scenarios<br>-Contribute to class discussions and activities. | -Utilize scientific inquiry by engaging in activities that lead to an understanding of scientific concepts.<br>-Construct arguments which support scientific concepts based on evidence<br>-Apply scientific concepts to real world scenarios<br>-Contribute to class discussions and activities. | -Utilize scientific inquiry by engaging in activities that lead to an understanding of scientific concepts.<br>-Construct arguments which support scientific concepts based on evidence<br>-Apply scientific concepts to real world scenarios<br>-Contribute to class discussions and activities. | -Utilizing scientific inquiry by engaging in activities that lead to an understanding of scientific concepts.<br>-Constructing arguments which support scientific concepts based on evidence<br>-Applying scientific concepts to real world scenarios<br>-Contributing to class discussions and activities. |