

**Teach4Mastery's Correlations for Peceptions Blue**

Multiplication, Division, & Fractions

Unit 4

**Alaska Content Standards**

Grade: **K** - Adopted: **2012**

Correlations as Provided by EdGate Correlation Services ©2014

AK.MP.	Mathematical Practices	Unit 4						
MP.1.	Make sense of problems and persevere in solving them.	21	22	23	24	25	26	27
MP.2.	Reason abstractly and quantitatively.	21	22	23	24	25	26	27
MP.3.	Construct viable arguments and critique the reasoning of others.	21	22	23	24	25	26	27
MP.4.	Model with mathematics.	21	22	23	24	25	26	27
MP.5.	Use appropriate tools strategically.	21	22	23	24	25	26	27
MP.6.	Attend to precision.	21	22	23	24	25	26	27
MP.7.	Look for and make use of structure.	21	22	23	24	25	26	27
MP.8.	Look for and express regularity in repeated reasoning.	21	22	23	24	25	26	27
AK.K.MD.	Measurement and Data							
	Describe and compare measurable attributes.							
K.MD.1.	Describe measurable attributes of objects (e.g., length or weight). Match measuring tools to attribute (e.g., ruler to length). Describe several measurable attributes of a single object.				24			

**Teach4Mastery's Correlations for Peceptions Blue**

Multiplication, Division, & Fractions

Unit 4

**Alaska Content Standards**

Grade: **1** - Adopted: **2012**

Correlations as Provided by EdGate Correlation Services ©2014

AK.MP.	Mathematical Practices	Unit 4						
MP.1.	Make sense of problems and persevere in solving them.	21	22	23	24	25	26	27
MP.2.	Reason abstractly and quantitatively.	21	22	23	24	25	26	27
MP.3.	Construct viable arguments and critique the reasoning of others.	21	22	23	24	25	26	27
MP.4.	Model with mathematics.	21	22	23	24	25	26	27
MP.5.	Use appropriate tools strategically.	21	22	23	24	25	26	27
MP.6.	Attend to precision.	21	22	23	24	25	26	27
MP.7.	Look for and make use of structure.	21	22	23	24	25	26	27
MP.8.	Look for and express regularity in repeated reasoning.	21	22	23	24	25	26	27
AK.1.CC.	Counting and Cardinality							
	Know ordinal names and counting flexibility.							
1.CC.1.	Skip count by 2s and 5s.	21	22	23				
AK.1.G.	Geometry							
	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 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 (break apart) into more equal shares creates smaller shares.	21	22	23	24	25	26	27

**Teach4Mastery's Correlations for Peceptions Blue**

Multiplication, Division, & Fractions

Unit 4

**Alaska Content Standards**

Grade: **2** - Adopted: **2012**

Correlations as Provided by EdGate Correlation Services ©2014

<b>AK.MP.</b>	<b>Mathematical Practices</b>	<b>Unit 4</b>						
<b>MP.1.</b>	<b>Make sense of problems and persevere in solving them.</b>	21	22	23	24	25	26	27
<b>MP.2.</b>	<b>Reason abstractly and quantitatively.</b>	21	22	23	24	25	26	27
<b>MP.3.</b>	<b>Construct viable arguments and critique the reasoning of others.</b>	21	22	23	24	25	26	27
<b>MP.4.</b>	<b>Model with mathematics.</b>	21	22	23	24	25	26	27
<b>MP.5.</b>	<b>Use appropriate tools strategically.</b>	21	22	23	24	25	26	27
<b>MP.6.</b>	<b>Attend to precision.</b>	21	22	23	24	25	26	27
<b>MP.7.</b>	<b>Look for and make use of structure.</b>	21	22	23	24	25	26	27
<b>MP.8.</b>	<b>Look for and express regularity in repeated reasoning.</b>	21	22	23	24	25	26	27
<b>AK.2.NBT.</b>	<b>Number and Operations in Base Ten</b>							
	<b>Understand place value.</b>							
<b>2.NBT.2.</b>	<b>Count up to 1000, skip-count by 5s, 10s and 100s.</b>	21	22	23				
<b>AK.2.MD.</b>	<b>Measurement and Data</b>							
	<b>Measure and estimate lengths in standard units.</b>							
<b>2.MD.1.</b>	<b>Measure the length of an object by selecting and using standard tools such as rulers, yardsticks, meter sticks, and measuring tapes.</b>	21	22	23	24	25	26	27
<b>AK.2.G.</b>	<b>Geometry</b>							
	<b>Reason with shapes and their attributes.</b>							
<b>2.G.3.</b>	<b>Partition circles and rectangles into 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.</b>	21	22	23	24	25	26	27

**Teach4Mastery's Correlations for Peceptions Blue**

Multiplication, Division, & Fractions

Unit 4

**Alaska Content Standards**

Grade: **3** - Adopted: **2012**

Correlations as Provided by EdGate Correlation Services ©2014

AK.MP.	Mathematical Practices	Unit 4						
MP.1.	Make sense of problems and persevere in solving them.	21	22	23	24	25	26	27
MP.2.	Reason abstractly and quantitatively.	21	22	23	24	25	26	27
MP.3.	Construct viable arguments and critique the reasoning of others.	21	22	23	24	25	26	27
MP.4.	Model with mathematics.	21	22	23	24	25	26	27
MP.5.	Use appropriate tools strategically.	21	22	23	24	25	26	27
MP.6.	Attend to precision.	21	22	23	24	25	26	27
MP.7.	Look for and make use of structure.	21	22	23	24	25	26	27
MP.8.	Look for and express regularity in repeated reasoning.	21	22	23	24	25	26	27
AK.3.NF.	Number and Operations –Fractions							
	Develop understanding of fractions as numbers.							
3.NF.1.	Understand a fraction $1/b$ (e.g., $1/4$ ) as the quantity formed by 1 part when a whole is partitioned into $b$ (e.g., 4) equal parts; understand a fraction $a/b$ (e.g., $2/4$ ) as the quantity formed by $a$ (e.g., 2) parts of size $1/b$ . (e.g., $1/4$ )	21	22	23	24	25	26	27
3.NF.2.	Understand a fraction as a number on the number line; represent fractions on a number line diagram.							
3.NF.2.a.	Represent a fraction $1/b$ (e.g., $1/4$ ) on a number line diagram by defining the interval from 0 to 1 as the whole and				24			
3.NF.2.b.	Represent a fraction $a/b$ (e.g., $2/8$ ) on a number line diagram or ruler by marking off a lengths $1/b$ (e.g., $1/8$ ) from 0. Recognize that the resulting interval has size $a/b$ (e.g., $2/8$ ) and that its endpoint locates the number $a/b$ (e.g., $2/8$ ) on the number line.				24			

-Grade 3 Continued-

	<b>Develop understanding of fractions as numbers.</b>							
<b>3.NF.3.</b>	<b>Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.</b>							
<b>3.NF.3.a.</b>	<b>Understand two fractions as equivalent if they are the same size (modeled) or the same point on a number line.</b>	21	22	23		25	26	
<b>3.NF.3.b.</b>	<b>Recognize and generate simple equivalent fractions (e.g., <math>1/2 = 2/4</math>, <math>4/6 = 2/3</math>). Explain why the fractions are equivalent (e.g., by using a visual fraction model).</b>	21	22	23		25	26	
<b>3.NF.3.c.</b>	<b>Express and model whole numbers as fractions, and recognize and construct fractions that are equivalent to whole numbers. For Example: Express 3 in the form <math>3 = 3/1</math>; recognize that <math>6/1 = 6</math>; locate <math>4/4</math> and 1 at the same point of a number line diagram.</b>	21	22	23	24	25	26	27
<b>3.NF.3.d.</b>	<b>Compare two fractions with the same numerator or the same denominator by reasoning about their size.</b>		22	23				
<b>AK.3.G.</b>	<b>Geometry</b>							
	<b>Reason with shapes and their attributes.</b>							
<b>3.G.2.</b>	<b>Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as <math>1/4</math> of the area of the shape.</b>	21	22	23	24	25	26	27

**Teach4Mastery's Correlations for Peceptions Blue**

Multiplication, Division, & Fractions

Unit 4

**Alaska Content Standards**

Grade: **4** - Adopted: **2012**

Correlations as Provided by EdGate Correlation Services ©2014

AK.MP.	Mathematical Practices	Unit 4						
MP.1.	Make sense of problems and persevere in solving them.	21	22	23	24	25	26	27
MP.2.	Reason abstractly and quantitatively.	21	22	23	24	25	26	27
MP.3.	Construct viable arguments and critique the reasoning of others.	21	22	23	24	25	26	27
MP.4.	Model with mathematics.	21	22	23	24	25	26	27
MP.5.	Use appropriate tools strategically.	21	22	23	24	25	26	27
MP.6.	Attend to precision.	21	22	23	24	25	26	27
MP.7.	Look for and make use of structure.	21	22	23	24	25	26	27
MP.8.	Look for and express regularity in repeated reasoning.	21	22	23	24	25	26	27
AK.4.OA.	Operations and Algebraic Thinking							
	Gain familiarity with factors and multiples.							
4.OA.4.	Find all factor pairs for a whole number in the range 1–100. Explain the correlation/differences between multiples and factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.	21	22	23				
AK.4.NF.	Number and Operations –Fractions							
	Extend understanding of fraction equivalence and ordering.							
4.NF.1.	Explain why a fraction $a/b$ is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.	21	22	23		25	26	
4.NF.2.	Compare two fractions with different numerators and different denominators (e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$ ). Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$ , $=$ , or		22	23				

-Grade 4 Continued-

	<b>Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.</b>							
<b>4.NF.3.</b>	<b>Understand a fraction <math>a/b</math> with <math>a &gt; 1</math> as a sum of fractions <math>1/b</math>.</b>							
<b>4.NF.3.a.</b>	<b>Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.</b>	21	22	23		25	26	27
<b>4.NF.3.b.</b>	<b>Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions (e.g., by using a visual fraction model). For example: <math>3/8 = 1/8 + 1/8 + 1/8</math>; <math>3/8 = 1/8 + 2/8</math>; <math>2\ 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8</math>.</b>						26	
<b>4.NF.3.c.</b>	<b>Add and subtract mixed numbers with like denominators (e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction).</b>					25	26	
<b>4.NF.3.d.</b>	<b>Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators (e.g., by using visual fraction models and equations to represent the problem).</b>					25	26	27
	<b>Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.</b>							
<b>4.NF.4.</b>	<b>Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.</b>							
<b>4.NF.4.a.</b>	<b>Understand a fraction <math>a/b</math> as a multiple of <math>1/b</math>. For example, use a visual fraction model to represent <math>5/4</math> as the product <math>5 \times (1/4)</math>, recording the conclusion by the equation <math>5/4 = 5 \times (1/4)</math>.</b>	21	22	23	24	25	26	27

**Teach4Mastery's Correlations for Peceptions Blue**

Multiplication, Division, & Fractions

Unit 4

**Alaska Content Standards**

Grade: 5 - Adopted: 2012

Correlations as Provided by EdGate Correlation Services ©2014

AK.MP.	Mathematical Practices	Unit 4						
MP.1.	Make sense of problems and persevere in solving them.	21	22	23	24	25	26	27
MP.2.	Reason abstractly and quantitatively.	21	22	23	24	25	26	27
MP.3.	Construct viable arguments and critique the reasoning of others.	21	22	23	24	25	26	27
MP.4.	Model with mathematics.	21	22	23	24	25	26	27
MP.5.	Use appropriate tools strategically.	21	22	23	24	25	26	27
MP.6.	Attend to precision.	21	22	23	24	25	26	27
MP.7.	Look for and make use of structure.	21	22	23	24	25	26	27
MP.8.	Look for and express regularity in repeated reasoning.	21	22	23	24	25	26	27
AK.5.NF.	Number and Operations –Fractions							
	Use equivalent fractions as a strategy to add and subtract fractions.							
5.NF.1.	Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$ . (In general, $\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}$ .)	21	22	23		25	26	27
5.NF.2.	Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators (e.g., by using visual fraction models or equations to represent the problem). Use benchmark fractions and number sense of fractions to estimate mentally and check the reasonableness of answers. For example, recognize an incorrect result $\frac{2}{5} + \frac{1}{2} = \frac{3}{7}$ , by observing that $\frac{3}{7} < \frac{1}{2}$ .	21	22	23	24	25	26	27
	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.							
5.NF.3.	Interpret a fraction as division of the numerator by the denominator ( $\frac{a}{b} = a \div b$ ). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers (e.g., by using visual fraction models or equations to represent the problem). For example, interpret $\frac{3}{4}$ as the result of dividing 3 by 4, noting that $\frac{3}{4}$ multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size $\frac{3}{4}$ . If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?	21	22	23	24	25	26	27



**Teach4Mastery's Correlations for Peceptions Blue**

Multiplication, Division, & Fractions

Unit 4

**Alaska Content Standards**

Grade: **6** - Adopted: **2012**

Correlations as Provided by EdGate Correlation Services ©2014

AK.MP.	Mathematical Practices	Unit 4						
MP.1.	Make sense of problems and persevere in solving them.	21	22	23	24	25	26	27
MP.2.	Reason abstractly and quantitatively.	21	22	23	24	25	26	27
MP.3.	Construct viable arguments and critique the reasoning of others.	21	22	23	24	25	26	27
MP.4.	Model with mathematics.	21	22	23	24	25	26	27
MP.5.	Use appropriate tools strategically.	21	22	23	24	25	26	27
MP.6.	Attend to precision.	21	22	23	24	25	26	27
MP.7.	Look for and make use of structure.	21	22	23	24	25	26	27
MP.8.	Look for and express regularity in repeated reasoning.	21	22	23	24	25	26	27
AK.6.NS.	The Number System							
	Compute fluently with multi-digit numbers and find common factors and multiples.							
6.NS.4.	Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. For example, express $36 + 8$ as $4(9 + 2)$ .	21	22	23				
	Apply and extend previous understandings of numbers to the system of rational numbers.							
6.NS.6.	Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.							
6.NS.6.c.	Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.				24			