

**Twin Rivers School District
Grade Four Common Core Math Pacing
2017-2018**

Trimester 2

Pretest (optional) October	26
<ul style="list-style-type: none"> Trimester 2 Pretest Exam Use the information as an additional pacing tool to guide instruction. 	
Beyond the Basic Facts	
<ul style="list-style-type: none"> BTBF is recommended to be done daily. During trimester 2, students will continue to work on multiplication/division fluency. 	

Unit 4: Equivalent Fractions

Instructional Window (11 days): October 27 – November 14				
Standard(s)				
<p>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.</p>				
<p>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 $<$, and justify the conclusions, e.g., by using a visual fraction model.</p>				
T.E. pg. #	SJ pg. #	Lesson Topic * = optional lesson (c) = combine lessons	Standard	Lesson Focus
		Lesson 1 Equivalent Fractions Using Area Models <i>(m)</i>	4.NF.1	C
		Lesson 2 Equivalent Fractions Using Number Lines <i>(m)</i>	4.NF.1	C
		Lesson 3 Equivalent Fractions Using Multiplication Property of One <i>(m)</i>	4.NF.1	P
		Lesson 4 Comparing Fractions Using Benchmark Fractions <i>(m)</i>	4.NF.2	C

m-major cluster, *s*-supporting cluster, *a*-additional cluster, *discovery*-possible discovery lesson

		Lesson 5 Comparing Fractions Using Benchmark Fractions <i>m</i>)	4.NF.2	P
		Lesson 6 Comparing Fractions Using Common Denominators <i>m</i>)	4.NF.2	C
		Lesson 7 Comparing Fractions With Common Denominators <i>m</i>)	4.NF.2	P
		Lesson 8 Comparing Fractions Using Common Numerators <i>m</i>)	4.NF.2	C
		Lesson 9 Comparing Fractions Using Common Numerators <i>m</i>)	4.NF.2	P
		Lesson 10 Comparing Fractions	4.NF.1,2	MT
Suggested Unit 4 Assessment Date – November 15 & 27				

Unit 5: Add and Subtract Fractions

Instructional Window (19 days): November 28 – January 9				
Standard(s)				
<p>4.NF.3b Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$.</p> <p>a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.</p> <p>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. Examples: $3/8 = 1/8 + 1/8 + 1/8$; $3/8 = 1/8 + 2/8$; $2\ 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8$.</p> <p>c. 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.</p> <p>d. 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.</p>				
T.E. pg. #	SJ pg. #	Lesson Topic * = optional lesson (c) = combine lessons	Standard	Lesson Focus
		Lesson 1 Decompose Fractions <i>m</i>)	4.NF.3b	C
		Lesson 2 Decompose Fractions <i>m</i>)	4.NF.3b	P
		Lesson 3 Add Fractions by Joining Parts <i>m</i>)	4.NF.3a	C

m-major cluster, *s*-supporting cluster, *a*-additional cluster, *discovery*-possible discovery lesson

		Lesson 4 Add Fractions by Joining Parts <i>(m)</i>	4.NF.3a	P
		Lesson 5 Subtract Fractions by Separating Parts <i>(m)</i>	4.NF.3a	C
		Lesson 6 Subtract Fractions by Separating Parts <i>(m)</i>	4.NF.3a	P
		Lesson 7 Decompose, Add, and Subtract Fractions <i>(m)</i>	4.NF.3a,b	MT
		Lesson 8 Improper Fractions <i>(m)</i>	4.NF.3c	P
		Lesson 9 Mixed Numbers <i>(m)</i>	4.NF.3c	P
		Lesson 10 Adding Mixed Numbers Using Equivalent Improper Fractions <i>(m)</i>	4.NF.3c	C
		Lesson 11* Adding Mixed Numbers Using Equivalent Improper Fractions <i>(m)</i>	4.NF.3c	P
		Lesson 12 Subtracting Mixed Numbers Using Equivalent Fractions <i>(m)</i>	4.NF.3c	C
		Lesson 13* Subtracting Mixed Numbers Using Equivalent Fractions <i>(m)</i>	4.NF.3c	P
		Lesson 14 (c) Adding Mixed Numbers Using the Commutative Property of Addition <i>(m)</i>	4.NF.3c	C
		Lesson 15 (c) Adding Mixed Numbers Using the Commutative Property of Addition <i>(m)</i>	4.NF.3c	P
		Lesson 16 Addition and Subtraction of Fractions in Word Problems <i>(m)</i>	4.NF.3d	P
		Lesson 17* Addition and Subtraction of Fractions in Multi-Step Word Problems <i>(m)</i>	4.NF.3d	P
		Lesson 18 Add and Subtract Fractions with Mixed Numbers <i>(m)</i>	4.NF.3c,d	MT
Suggested Unit 5 Assessment Date – January 10 & 11				

Unit 6: Multiply Fractions

m-major cluster, *s*-supporting cluster, *a*-additional cluster, *discovery*-possible discovery lesson

Instructional Window (8 days): January 12 – January 24

Standard(s)

- 4.NF.4:** Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.
- Understand a fraction a/b as a multiple of $1/b$. For example, use a visual fraction model to represent $5/4$ as the product $5 \times (1/4)$, recording the conclusion by the equation $5/4 = 5 \times (1/4)$.
 - Understand a multiple of a/b as a multiple of $1/b$, and use this understanding to multiply a fraction by a whole number. For example, use a visual fraction model to express $3 \times (2/5)$ as $6 \times (1/5)$, recognizing this product as $6/5$. (In general, $n \times (a/b) = (n \times a)/b$.)
 - Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. For example, if each person at a party will eat $3/8$ of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?

T.E. pg. #	SJ pg. #	Lesson Topic * = optional lesson (c) = combine lessons	Standard	Lesson Focus
		Lesson 1(c) Decomposing Fractions <i>(m)</i>	4.NF.4a	C
		Lesson 2(c) Decomposing Fractions <i>(m)</i>	4.NF.4a	P
		Lesson 3 Multiplying Fractions <i>(m)</i>	4.NF.4b	C
		Lesson 4 Multiplying Fractions <i>(m)</i>	4.NF.4b	P
		Lesson 5 Word Problems with Fractions <i>(m)</i>	4.NF.4c	C
		Lesson 6 Word Problems with Fractions <i>(m)</i>	4.NF.4c	P
		Lesson 7 Multiplying Fractions <i>(m)</i>	4.NF.4a-c	MT

Suggested Unit 6 Assessment Date – January 25 - 29

Unit 7: Decimal Form of Fractions

Instructional Window (11 days): January 30 – February 13

Standard(s)

4.NF.5: Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. For example, express $3/10$ as $30/100$, and add $3/10 + 4/100 = 34/100$.

4.NF.6: Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as $62/100$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.

m-major cluster, *s*-supporting cluster, *a*-additional cluster, *discovery*-possible discovery lesson

4.NF.7: Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using the number line or another visual model. CA

T.E. pg. #	SJ pg. #	Lesson Topic * = optional lesson (c) = combine lessons	Standard	Lesson Focus
		Lesson 1(c) Expressing Fractions with Denominators of 10 & 100 <i>(m)</i>	4.NF.5	C
		Lesson 2(c) Expressing Fractions with Denominators of 10 & 100 <i>(m)</i>	4.NF.5	P
		Lesson 3* Adding Fractions <i>(m)</i>	4.NF.5	P
		Lesson 4 Fractions to Decimals <i>(m)</i>	4.NF.6	C
		Lesson 5 Fractions to Decimals <i>(m)</i>	4.NF.6	P
		Lesson 6(c) Convert Decimals to Fractions <i>(m)</i>	4.NF.6	C
		Lesson 7(c) Convert Decimals to Fractions <i>(m)</i>	4.NF.6	P
		Lesson 8 Comparing Decimals <i>(m)</i>	4.NF.7	C
		Lesson 9 Comparing Decimals <i>(m)</i>	4.NF.7	P
		Lesson 10 Fractions and Decimals <i>(m)</i>	4.NF.6,7	MT

Suggested OPTIONAL Unit 7 Assessment Date – February 14 & 15

End of Trimester 2 Assessments

Suggested Review Day for Trimester 2 Benchmark Date – February 20
Suggested Trimester 2 Cumulative Benchmark Date – February 21 & 22
Performance Task – February 23 & 26

m-major cluster, *s*-supporting cluster, *a*-additional cluster, *discovery*-possible discovery lesson