

Alignment of PRIME 2 Fraction Activities with *Everyday Math* Lessons
Grade 4 EM Lesson Order

PRIME2 Activity	Mathematics Concept	Use with Grade 4 EM lesson	Use with Grade 5 EM lesson	Notes	CCSS – M Standard
<i>Fac Tac Toe</i>	Multiplication and factors	3.3 Multiplication Facts Practice	2.8 Multiplication of Whole Numbers and Decimals	Excellent game for both grades and for ongoing practice.	5.NF.4
<i>Cookie division problems vs Rose division problem</i>	Understanding partitive and quotative division	3.4 Multiplication and Division	4.2 Partial Quotient Division Algorithm	Grade 4: Consider this activity in conjunction with Division Sort Problems as a precursor to 3.4 on division in EM. Grade 5: Use this with Cookie and Rose model to investigate the two meanings of division before presenting the partial quotient algorithm.	3.OA.6
<i>Division Sort Problems (partitive or quotative)</i>	Understanding partitive and quotative division	3.4 Multiplication and Division	4.2 Partial Quotient Division Algorithm	Grade 4: Consider this activity in conjunction with Cookie and Rose model as a precursor to 3.4 on division in EM. Grade 5: Use this with Cookie and Rose model to investigate the two meanings of division before presenting the partial quotient algorithm.	3.OA.6
<i>Use unit fractions to determine “1” on a number line</i>	Build fractions from unit fractions	7.1 Review of Basic Fraction Concepts 7.10 The ONE for Fractions	5.1 Fraction Review	Grade 4: Activity is similar to MJ2 p.187 on TE p.573. May be used after this EM page. Grade 5: May be used anywhere in 5.1.	4.NF.3b
<i>Making a Number Line</i>	Comparing fractions, equivalent fractions	7.1 Review of Basic Fraction Concepts 7.7 Equivalent fractions 7.9 Comparing Fractions	5.3 Comparing and Ordering Fractions	Grade 4: Use within different EM lessons to model similar concepts.	4.NF.1 5.NF.1
<i>Field Trip Sandwich Problems</i>	Equal shares Fraction addition	7.1 Review of Basic Fraction Concepts 7.5 Fraction Addition and Subtraction	8.12 Fraction Division	Grade 4: Use to provide alternative model to pattern blocks.	4.NF.3 5.NF.3, 5.NF.7b
<i>Fractions with Cuisenaire Rods</i>	Multiplication of Fractions	7.4 Pattern Block Fractions	8.5 Fractions of Fractions	Grade 4: May be used as a substitute for pattern block lesson. Grade 5: May be used as replacement for EM lesson.	4.NF.2 5.NF.5b
<i>Fraction Kit</i>	Equivalent fractions, operations with fractions	7.4 Pattern Block Fractions 7.5 Fraction Addition and Subtraction 7.6 Many Names for Fractions 7.7 Equivalent fractions	5.4 Two Rules for Finding Equivalent Fractions 8.2 Adding Mixed Numbers 8.3 Subtracting Mixed Numbers	Grade 4: Use kit within different EM lessons to model similar concepts. Grade 5: May be used as an alternative model to drawing of rectangle in 5.4. For 8.2 and 8.3, may use fraction kit to model + and - with mixed numbers.	3.NF.1, 3.NF.3a,b 4.NF.1, 4.NF.2 5.NF.1
<i>Fractions of a Square</i>	Dividing an area model; identifying fractions of a region	7.4 Pattern-Block Fractions	5.1 Fraction Review	Grade 4: Use after Pattern Block Fractions activities. Grade 5: An open-ended question that may be used anywhere in this EM lesson.	4.NF.1, 4.NF.3a,b

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<i>Adding and Subtracting Fractions on a Number Line</i>	Addition and subtraction of fractions	7.5 Fraction Addition & Subtraction	6.8 Using a Slide Rule to Add & Subtract Fractions 8.2 Adding Mixed Numbers 8.3 Subtracting Mixed Numbers	Grade 4: Change fractions to those with like denominators only. Use to introduce another visualization of fractions. Grade 5: May replace Lesson 6.8. Use to provide alternative model to fraction pies in Lessons 8.2 & 8.3 and to provide support for addition and subtraction practice. May change to or add mixed numbers as well.	4.NF.3a, c 5.NF.1
<i>Fraction Track game</i>	Addition and subtraction of fractions	7.5 Fraction Addition & Subtraction	8.2 Adding Mixed Numbers 8.3 Subtracting Mixed Numbers	Grade 4: May be used with like denominators or for a challenge activity. Grade 5: Excellent game to practice addition and subtraction on the number line. *This game is also available in an electronic version at http://illuminations.nctm.org/ActivityDetail.aspx?ID=18	4.NF.3a,b 5.NF.1
<i>Fractured Fractions game</i>	Addition and subtraction of fractions	7.5 Fraction Addition & Subtraction	6.8 Using a Slide Rule to Add & Subtract Fractions	Grade 4: Use with pattern blocks to help students with fraction addition. Grade 5: Could be used before lesson to practice fraction addition with pattern blocks. Could be used after lesson with the sum totals changed to greater than 1.	4.NF.3b 5.NF.1
<i>Measuring with Fraction Strips/Cuisenaire rods</i>	Fraction addition	7.5 Fraction Addition and Subtraction	5.3 Comparing and Ordering Fractions 6.8 Using a Slide Rule to Add and Subtract Fractions	Consider using Cuisenaire rods if available instead of fraction strips Grade 5: May be used in 5.3 to support MJ1, page 131 in TE page 131.	5.NF.2
<i>Dinosaur Pie</i>	Repartitioning and chunking to get equivalent fractions	7.7 Equivalent fractions	5.4 Two Rules for Finding Equivalent Fractions	Grade 4: May be used after teaching Part 1	4.NF.1 5.NF.3
<i>Fraction Sentences</i>	Addition and subtraction of fractions	7.7 Equivalent Fractions	8.2 Adding Mixed Numbers	Grade 4: Could be used to deepen practice with equivalent fractions and addition/subtraction as long as it is modeled with concrete as well. Grade 5: Could be used to deepen practice with addition/subtraction of fractions. Could be a stand alone lesson with concrete models to support.	4.NF.3c 5.NF.1

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<i>Compare Fractions to 0, ½, and 1</i>	Using benchmarks to compare/order fractions	7.9 Comparing Fractions	5.3 Comparing and Ordering Fractions	Grade 4: Can be used after Comparing Fractions with ½ MJ2, page 205. Grade 5: May be used in 5.3 after ‘Ordering Fractions’ in Part 1.	4.NF.2
<i>Comparing Fraction Pairs</i>	Use a variety of strategies to compare/order fractions	7.9 Comparing Fractions	5.3 Comparing and Ordering Fractions 8.1 Review Comparing Fractions	Grade 4: May be used at end of 7.9 Part 1. Grade 5: May be used in 5.3 after ‘Ordering Fractions’ in Part 1. May also be used in 8.1 in ‘Comparing Fractions Using Common Denominators’.	4.NF.2
<i>Determine fractions on a number line : CMP Number Lines</i>	Situate fractions on a number line	7.9 Comparing Fractions	5.2 Mixed Numbers 5.1 Fraction Review	Grade 4: Some number line activities may be challenging for Grade 4. Grade 5: Some number line activities may be challenging for Grade 5.	4.NF.2 4.NF.3b
<i>Two Green Triangles/ What Do You Call the ___?/ Naming Fractional Parts</i>	Reunitizing	7.10 The ONE for Fractions	5.1 Fraction Review	Grade 4: Could be used as replacement for EM lesson. Grade 5: May be used as reminder of the importance of defining the “whole” as part of the fraction review.	4.NF.2 5.NF.3
<i>Using Tangrams to Reunitize the Whole</i>	Reunitizing; Multiplication of fractions	7.10 The ONE for Fractions	5.1 Fraction Review	Grade 4: Similar to Two Green Triangles, but more complex. May be used as extension activity. Grade 5: May be used as reminder of the importance of defining the “whole” as part of the fraction review.	4.NF.2 5.NF.3
<i>Getting to One</i>	Decimals as part of a whole	9.3 Using calculator to rename fractions to decimals	5.7 Fractions and Decimals Pt. 2	Grade 5: Using calculator to convert fractions to decimals. Could use this activity as a formative assessment at end of lesson. Grade 4: Could be used in conjunction with Study Link 9.3 and as subsequent formative assessment and practice.	5.NF.3
<i>100 Beads</i>	Converting fractions to decimals & percents	Above Grade 4 standards	5.10 The Percent Circle Reading Circle Graphs 5.11 The Percent Circle Making Circle Graphs	Grade 5: May be used as a substitute for EM lessons.	5.MD.2
<i>Division of fractions pattern worksheets</i>	Division of fractions	Above Grade 4 standards	8.12 Fraction Division	Grade 5: Use in conjunction with Cookie/Rose division models to discuss the patterns of division of whole numbers by fractions.	5.NF.7
<i>Fraction Multiplication and Cutting Paper</i>	Multiplication of Fractions	Above Grade 4 standards	8.6 An Area Model for Fraction Multiplication	Grade 5: May be used as a substitute for or additional practice with EM lesson.	5.NF.4b

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<i>Fractiono. Three in a row!</i>	Arithmetic Operations with fractions	Above Grade 4 standards	5.1 Fraction Review	Grade 5: Could be used as precursor to lesson 8.2. Practice with fractions before moving onto the mixed numbers of the lesson.	5.NF.3
<i>Naked Fractions</i>	Modeling division of fractions	Above Grade 4 standards	8.12 Fraction Division	Grade 5: Use with concrete models to practice the concept of division of whole numbers by fractions.	5.NF.7c
<i>Sara’s Candy Problem</i>	Multiplication of fractions	Above Grade 4 standards	8.6 Area Model for Fraction Multiplication	Grade 5: Recommended to teach diagramming model as a strategy for students to multiply fractions.	5.NF.4
<i>Smallest and largest quotient</i>	Division of fractions	Above Grade 4 standards	8.12 Fraction Division	Grade 5: Could be used as extended practice or challenge problem	5.NF.3
<i>Sum Target Problems</i>	Addition of fractions	Above Grade 4 standards	5.3 Comparing & Ordering Fractions	Grade 5: Could be used after “Adding with Fraction Sticks” MJ page 131 to extend addition of fractions with unlike denominators.	5.NF.1
<i>Exploring Playgrounds</i>	Multiplication of fractions	Above Grade 4 standards	8.5 Fractions of Fractions	Grade 5: Excellent for introduction the concept of fraction multiplication. Use prior to the EM lesson.	5.NF.6