Alignment of PRIME 2 Fraction Activities with Everyday Math Lessons
Website Order

| PRIME2 Activity | Mathematics Concept | Use with Grade 4 EM lesson | Use with Grade 5 EM lesson | Notes | CCSS - M Standard |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fractions of a Square | 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. <br> Grade 5: An open-ended question that may be used anywhere in this EM lesson. | 4.NF.1, <br> 4.NF.3a,b |
| Field Trip Sandwich Problems | Equal shares Fraction addition | 7.1 Review of Basic Fraction Concepts <br> 7.5 Fraction Addition and Subtraction | 8.12 Fraction Division | Grade 4: Use to provide alternative model to pattern blocks. | 4.NF. 3 <br> 5.NF.3, <br> 5.NF.7b |
| Dinosaur Pie | 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. | $\begin{aligned} & \text { 4.NF.1 } \\ & \text { 5.NF.3 } \end{aligned}$ |
| Fraction Kit | Equivalent fractions, operations with fractions | 7.4 Pattern Block Fractions <br> 7.5 Fraction Addition and Subtraction <br> 7.6 Many Names for Fractions <br> 7.7 Equivalent fractions | 5.4 Two Rules for Finding Equivalent Fractions 8.2 Adding Mixed Numbers <br> 8.3 Subtracting Mixed Numbers | Grade 4: Use kit within different EM lessons to model similar concepts. <br> 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 |
| Making a Number Line | Comparing fractions, equivalent fractions | 7.1 Review of Basic Fraction Concepts <br> 7.7 Equivalent fractions <br> 7.9 Comparing Fractions | 5.3 Comparing and Ordering Fractions | Grade 4: Use within different EM lessons to model similar concepts. | $\begin{aligned} & \text { 4.NF.1 } \\ & \text { 5.NF.1 } \end{aligned}$ |
| Measuring with Fraction Strips/Cuisenaire rods | Fraction addition | 7.5 Fraction Addition and Subtraction | 5.3 Comparing and Ordering Fractions <br> 6.8 Using a Slide Rule to Add and Subtract Fractions | Consider using Cuisenaire rods if available instead of fraction strips. <br> Grade 5: May be used in 5.3 to support MJ1, page 131 in TE page 131. | 5.NF. 2 |
| Compare Fractions to $0,1 / 2$, and 1 | 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 $1 / 2$ MJ2, page 205. Grade 5: May be used in 5.3 after 'Ordering Fractions' in Part 1. | 4.NF. 2 |
| Comparing Fraction Pairs | Use a variety of strategies to compare/order fractions | 7.9 Comparing Fractions | 5.3 Comparing and Ordering Fractions <br> 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 |
| Use unit fractions to determine " 1 " on a number line | Build fractions from unit fractions | 7.1 Review of Basic Fraction Concepts <br> 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 |
| Determine fractions on a number line : CMP Number Lines | Situate fractions on a number line | 7.9 Comparing Fractions | 5.2 Mixed Numbers <br> 5.1 Fraction Review | Grade 4: Some number line activities may be challenging for Grade 4. <br> Grade 5: Some number line activities may be challenging for Grade 5. | 4.NF. 2 <br> 4.NF.3b |


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| :---: | :---: | :---: | :---: | :---: | :---: |
| Sum Target Problems | 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 |
| Adding and Subtracting Fractions on a Number Line | Addition and subtraction of fractions | 7.5 Fraction Addition \& Subtraction | 6.8 Using a Slide Rule to Add \& Subtract Fractions <br> 8.2 Adding Mixed Numbers <br> 8.3 Subtracting Mixed Numbers | Grade 4: Change fractions to those with like denominators only. Use to introduce another visualization of fractions. <br> 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. | $\begin{aligned} & \text { 4.NF.3a, c } \\ & \text { 5.NF.1 } \end{aligned}$ |
| Fraction Track game | 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. <br> Grade 5: Excellent game to practice addition and subtraction on the number line. <br> *This game is also available in an electronic version at http://illuminations.nctm.org/ActivityDetail. aspx?ID=18 | 4.NF.3a,b $\text { 5.NF. } 1$ |
| Fractured Fractions game | 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. <br> 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 . | $\begin{aligned} & \text { 4.NF.3b } \\ & \text { 5.NF.1 } \end{aligned}$ |
| Two Green Triangles/ What Do You Call the $\qquad$ ?/ Naming Fractional Parts | Reunitizing | 7.10 The ONE for Fractions | 5.1 Fraction Review | Grade 4: Could be used as replacement for EM lesson. <br> Grade 5: May be used as reminder of the importance of defining the "whole" as part of the fraction review. | $\begin{aligned} & \text { 4.NF. } 2 \\ & \text { 5.NF.3 } \end{aligned}$ |
| Exploring Playgrounds | Multiplication of fractions | Above Grade 4 standard | 8.5 Fractions of Fractions | Grade 5: Excellent for introduction the concept of fraction multiplication. Use prior to the EM lesson. | 5.NF. 6 |
| Using Tangrams to Reunitize the Whole | 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. <br> Grade 5: May be used as reminder of the importance of defining the "whole" as part of the fraction review. | $\begin{aligned} & \text { 4.NF.2 } \\ & \text { 5.NF.3 } \end{aligned}$ |

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| :---: | :---: | :---: | :---: | :---: | :---: |
| Fractions with Cuisenaire Rods | 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. <br> Grade 5: May be used as replacement for EM lesson. | $\begin{aligned} & \text { 4.NF. } 2 \\ & \text { 5.NF.5b } \end{aligned}$ |
| Fraction <br> Multiplication and Cutting Paper | 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 |
| 100 Beads | 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 |
| Division Sort Problems (partitive or quotitive) | 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. <br> 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 |
| Cookie division problems vs Rose division problem | 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. <br> 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 |
| Smallest and largest quotient | 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 |
| Division of fractions pattern worksheets | 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 |
| Naked Fractions | 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 |
| Sara's Candy Problem | 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 |
| Fac Tac Toe | 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 |
| Fractiono. Three in a row! | 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 |

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| Fraction Sentences | 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. <br> Grade 5: Could be used to deepen practice with addition/subtraction of fractions. Could be a stand alone lesson with concrete models to support. | 5.NF. 1 |
| Getting to One | 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 |

