

5th Grade Math Curriculum Bundle # 7

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| Title | Suggested Dates |
| Fractions and Decimals | January 5 – January 29 (18 days) |



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| Big Idea/Enduring Understanding | Guiding Questions |
| A fraction or decimal describes the division of a whole into equal parts and can be interpreted in more than one way. | <p>How do fractions and decimals relate to one another?</p> <p>What are multiple ways to represent one fractional value?</p> <p>What strategies can be used to compare and order fractions and decimals?</p> |

The resources included here provide teaching examples and/or meaningful learning experiences to address the District Curriculum. In order to address the TEKS to the proper depth and complexity, teachers are encouraged to use resources to the degree that they are congruent with the TEKS and research-based best practices. Teaching using only the suggested resources does not guarantee student mastery of all standards. Teachers must use professional judgment to select among these and/or other resources to teach the district curriculum.

| Knowledge & Skills with Student Expectations | District Specificity/Examples | Suggested Resources (See note above) | |
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| | | Teachers will use Math Investigations as the main instructional resource. District resources are listed and categorized to indicate suggested uses. Any additional resources must be aligned with the TEKS. | |
| <p>5.2 The student uses fractions in problem-solving situations.</p> <p>5.2A Generate a fraction equivalent to a given fraction such as 1/2 and 3/6 or 4/12 and 1/3.</p> <p><u>TEACHER NOTES:</u> Review vocabulary of prime and composite numbers from Bundle 1</p> | <p>Including but not limited to</p> <ul style="list-style-type: none"> • demonstrates an understanding of equivalence by analyzing a concrete model(s), pictorial model(s), or a fraction(s) to generate an equivalent fraction that uses a different denominator(s) • generate equivalent fraction(s) to a given fraction with a specific denominator (ex: Create a model equivalent to 3/8 with a denominator of 24 or a specific numerator) • generalize equivalence properties (If 3/4 is equivalent to 9/12 and 12/16, then 9/12 is equivalent to 3/4 and 12/16) Need to be able to use simplest form and increasing form (1/3, 2/6, 3/9 ...) • generates a fraction using equivalency, but does not necessarily mean simplest form <ul style="list-style-type: none"> ○ Ex: 12/16 = 9/12) | <p><u>Math Investigations</u></p> <p><u>What's That Portion Unit 4</u></p> <p>Investigation 1 Sessions 1 – 5 pages 22 – 52</p> <p><u>What's That Portion Unit 4</u></p> <p>Investigation 2 Sessions 4 – 5 pages 76 – 84</p> | <p><u>Whole Group Lessons</u></p> <p><u>Envision</u> Topic 7 Lessons 1 – 2</p> <p><u>Envision</u> Topic 8 Lessons 1 – 4</p> <p><u>Small Group Lessons/Centers</u></p> <p><u>A.I.R.R</u> Equivalence Concentration #29 Making Equivalent Fractions #31 Make a Match #32</p> |

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| | <ul style="list-style-type: none"> • generates a fraction using equivalence in simplest form <ul style="list-style-type: none"> ○ Ex: $12/16 = 3/4$ | <p><u>Math Investigations</u></p> <p><u>Decimals on Grids and Number Lines</u></p> <p>Unit 6</p> | <p><u>Kamico</u> Trouble with Triples page 44</p> |
| <p>5.2 The student uses fractions in problem-solving situations.</p> <p>5.2B Generate a mixed number equivalent to a given improper fraction or generate an improper fraction equivalent to a given mixed number</p> | <p>Including but not limited to</p> <ul style="list-style-type: none"> • recognize fractions are represented by equal size parts of a whole or by a set of objects • generate a mixed number equivalent to a given improper fraction • generate an improper fraction equivalent to a given mixed number • use "out of" when distinguishing part vs whole • describe fractional parts using name and symbols in multiple ways of both mixed numbers and improper fractions (Ex: $7/4$ (improper) is equivalent to $1 \frac{3}{4}$ (mixed number), 7 out of 4 equal parts) • demonstrate using concrete and pictorial objects that the same improper fraction and mixed number are equivalent • analyze the difference between proper and improper fractions | <p>Investigation 1 Sessions 7 – 10 pages 59 – 80</p> | <p><u>Whole Group Lessons</u></p> <p><u>Envision</u> Topic 7 Lessons 3</p> <p><u>Small Group Lessons/Centers</u></p> <p><u>A.I.R.R</u> (Addendum book) Roll an Improper Fraction #1 Write out the Steps #2 Match Makers #3 <u>A.I.R.R</u> Write the Equivalence #43</p> <p><u>Kamico</u>, A Mixed Bag page 59</p> <p><u>Additional Resources on District web page</u> Bingo –Mixed Numbers/Improper Fractions</p> <p><u>Integrated Math/Science Lessons District web page - Mixing It Up With fractions</u></p> |
| <p>5.2 The student uses fractions in problem-solving situations.</p> <p>5.2C Compare two fractional quantities in problem-solving situations using a variety of methods, including common denominators.</p> | <p>Including but not limited to</p> <ul style="list-style-type: none"> • analyze fractional quantities using a variety of methods (concrete, pictorial, verbal or abstract) • compare two fractional quantities in a problem situation (less than one whole , • equal to one whole, or greater than one whole) using comparison terminology of examples and | <p><u>Math Investigations</u></p> <p><u>What's That Portion</u></p> <p>Unit 4</p> <p>Investigation 2 Sessions 2 & 3 pages 63 – 75</p> | <p><u>Whole Group Lessons</u></p> <p><u>Envision</u> Topic 9 Lessons 1 -5</p> |

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| | <p>non-examples</p> <ul style="list-style-type: none"> order fractional quantities in problem-solving situations using a variety of methods rename fractions using common denominators when adding and/or subtraction | <p><u>Math Investigations</u></p> <p><u>What's That Portion</u> Unit 4 Investigation 2 Session 6 pages 85-87</p> | <p><u>Small Group Lessons/Centers</u></p> <p><u>A.I.R.R</u> Write a Fraction and Decimal #44 Shade the Decimal #45 What's in a Name? #46</p> <p><u>Kamico</u> Select a Sign page 62</p> |
| <p>5.2 The student uses fractions in problem-solving situations.</p> <p>5.2D Use models to relate decimals to fractions that name tenths, hundredths, and thousandths.</p> | <p>Including but not limited to</p> <ul style="list-style-type: none"> relate decimals to fractions using concrete objects and pictorial models (Ex: $\frac{3}{4}$ to 0.75 Ex: 0.075 to $\frac{75}{1000}$ or $\frac{6}{4}$ to 1.5) relate fractions to decimals using concrete objects and pictorial models (Ex: $\frac{3}{4}$ to 0.75 Ex: 0.075 to $\frac{75}{1000}$ or $\frac{6}{4}$ to 1.5) generalize equivalence relationship using models (Ex: $\frac{30}{100}$ to $\frac{3}{10}$ to .3) | <p><u>Math Investigations</u></p> <p><u>What's That Portion</u> Unit 9 Investigation 1 Session 2 pages 27 – 34</p> <p><u>Decimals on Grids and</u> <u>Number Lines</u> Unit 6 Investigation 2 Session 2 pages 92 – 96</p> | <p><u>Whole Group Lessons</u></p> <p><u>Envision</u> Topic 7 Lessons 4 – 6</p> <p><u>Small Group Lessons/Centers</u></p> <p><u>Region IV Prep</u> Decimals Lesson pages 40 – 51</p> <p><u>Fifth Sense</u> Objective 1 Lesson 5.2 D</p> |
| <p>5.14 The student applies Grade 5 mathematics to solve problems connected to everyday experiences and activities in and outside of school.</p> <p>5.14A Identify the mathematics in everyday situations.</p> <p>5.14C Select or develop an appropriate problem-solving plan or strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.</p> | <p>Including but not limited to</p> <ul style="list-style-type: none"> extract necessary information needed to solve the problem (ignoring extraneous information) and recognizes the operation(s) needed to solve | | <p><u>Whole Group Lessons</u></p> <p><u>Envision</u> Topic 8 Lessons 4 and 6</p> <p><u>Envision</u> Topic 10 Lessons 6</p> |