

5th Grade Math Curriculum Bundle # 8

Title		Suggested Dates
Adding & Subtracting Fractions / Statistics / Probability		February 1 - February 19 (13 days)

Big Idea/Enduring Understanding	Guiding Questions
<p>Fractions can be combined and separated using a variety of methods.</p> <p>Data can be collected and analyzed to determine an answer to a specific question.</p> <p>Chances of an event occurring can be made by an expression or a prediction.</p>	<p>How can different models be used to add and subtract fractions?</p> <p>How do you determine if a fraction is in its simplest form?</p> <p>What are some methods used to display collected data?</p> <p>Which type of graph is most appropriate to represent a given set of data?</p> <p>What is the probability of a given event?</p> <p>How can fractions be used to make a prediction of a future event?</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)	
<p>5.3 The student adds, subtracts, multiplies, and divides to solve meaningful problems.</p> <p>5.3E Model situations using addition and/or subtraction involving fractions with like denominators using concrete objects, pictures, words, and numbers</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 • uses various strategies to solve problems involving fractions with like denominators • Examples: <ul style="list-style-type: none"> ○ Coins: Had nine dimes and then spent six dimes. What fractions of the dimes remain? ○ Scales: 3/8 pound of potatoes and 1/8 pound of onion, how many more pounds of potatoes were bought than onions? ○ Measuring cups: 3/4 cup of milk + 1/4 cup of water is how much liquid? ○ Ruler: 3/8 inch + 7/8 inch is how many inches? 	<p>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> <p><u>Math Investigations</u></p> <p><u>Decimals on Grids and Number Lines</u> Unit 1</p> <p>Investigation 2 Session 1 pages 86 – 91</p> <p>Teacher Note: Skip session 2.</p> <p><u>Decimals on Grids and Number Lines</u> Unit 1</p> <p>Investigation 2 Sessions 3 – 8</p>	<p><u>Whole Group Lessons</u></p> <p><u>Envision</u> Topic 10 Lessons 1 – 5</p> <p><u>Small Group Lessons/Centers</u></p> <p><u>A.I.R.R</u> Modeling Fraction Sums and Differences # 75 Understanding Problems Involving Fractions # 76 Model Sums and Differences of Fractions # 78</p>

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	<ul style="list-style-type: none"> ○ Circle fractions to represent pizza: John ate 1 1/3 pizzas and Matt ate 2/3 of the pizza. How much more pizza did John eat than Matt? 	pages 97 – 117	<u>Kamico</u> Denominator Dominoes page 105
<p>5.12 The student describes and predicts the results of a probability experiment.</p> <p>5.12A Use fractions to describe the results of an experiment</p>	<p>Including but not limited to</p> <ul style="list-style-type: none"> ● conduct experiments or evaluate a table of results and determine the probability of an event occurring ● describe the result (outcomes)of an experiment ● use a fraction to represent the probability of an event (including equivalent fractions) 	<p><u>Math Investigations</u></p> <p><u>How Long Can You Stand On One Foot?</u> Unit 9</p> <p>Investigation 3 Sessions 1 – 4 Pages 82 – 108</p>	<p><u>Whole Group Lessons</u></p> <p><u>Envision</u> Topic 20 Lesson 2</p> <p><u>Fifth Sense</u> Objective 5 Lesson 5.12 A and B</p> <p><u>Small Group Lessons/Centers</u></p> <p><u>Kamico</u> Exceptional Experimental Results Pages 292</p>
<p>5.12 The student describes and predicts the results of a probability experiment.</p> <p>5.12B Use experimental results to make predictions.</p>	<p>Including but not limited to</p> <ul style="list-style-type: none"> ● describe the result (outcomes) using real world situations and/or fractions <p><u>Teacher Note</u> – Answer choices will generally be in equivalent fraction.</p> <ul style="list-style-type: none"> ● evaluate results to predict the probability of a future event occurring ● use results to predict which event is more likely, less likely, not possible or certain to occur 		<p><u>Whole Group Lessons</u></p> <p><u>Envision</u> Topic 20 Lesson 3</p> <p><u>Small Group Lessons/Centers</u></p> <p><u>Kamico</u> Mini Muffin Madness page 302</p>
<p>5.12 The student describes and predicts the results of a probability experiment.</p> <p>5.12C List all possible outcomes of a probability experiment such as tossing a coin</p>	<p>Including but not limited to</p> <ul style="list-style-type: none"> ● use hands-on experiences to develop strategies to find all possible outcomes in a problem situation ● demonstrate various methods of organizing all possible outcomes (input/output tables, list) 		<p><u>Whole Group Lessons</u></p> <p><u>Envision</u> Topic 20 Lessons 1</p>

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			<p><u>Small Group Lessons/Centers</u></p> <p><u>Kamico</u> That Suits Me Just Fine page 309</p> <p><u>A.I.R.R</u> (Addendum) List the Outcome #29 Experiments and Outcomes #30 What are Outcomes? #31</p> <p><u>Region VI Prep</u> Objective 5 pages 218 – 224</p>
<p>5.13 The student solves problems by collecting, organizing, displaying, and interpreting sets of data.</p> <p>5.13A Use tables of related number pairs to make line graphs</p>	<p>Including but not limited to</p> <ul style="list-style-type: none"> • collect, organize, display, and interpret real world problems to create tables of related number pairs (vertical or horizontal) with appropriate labels • create a line graph to represent the related number pairs with appropriate labels 		<p><u>Small Group Lessons/Centers</u></p> <p><u>Kamico</u> What’s My Line? page 318</p>
<p>5.13 The student solves problems by collecting, organizing, displaying, and interpreting sets of data.</p> <p>5.13B Describe characteristics of data presented in tables and graphs including median, mode, and range</p>	<p>Including but not limited to</p> <ul style="list-style-type: none"> • interpret data and tables to describe median, mode, range • describe the process of how to find median (given an even number and an odd number of data), mode (can be none or more than one mode) and the range of a given data set (spread)) • identify and match data that could have the same mode and median and/or range • interpret how changing the data will alter the median, mode, and range in a set of data 	<p><u>Math Investigations</u></p> <p><u>How Long Can You Stand On One Foot?</u> Unit 9</p> <p>Investigation 1 Sessions 1 – 4 Pages 22 – 45</p> <p><u>Math Investigations</u></p> <p><u>How Long Can You Stand On One Foot?</u> Unit 9</p> <p>Investigation 2 Sessions 1 – 6</p>	<p><u>Whole Group Lessons</u></p> <p><u>Envision</u> Topic 19 Lessons 4 – 5</p> <p><u>Small Group Lessons/Centers</u></p> <p><u>A.I.R.R</u> (Addendum) Data Experts #34 Data Search #35 Smartie Data #33</p> <p><u>Kamico</u> Data Diagnosis page 335 Riding the Range but Keep off the Median (Old Kamico)</p>

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		Pages 52 – 80	<u>TEXTEAMS</u> , Probability and Statistics, pages 43-49
<p>5.13 The student solves problems by collecting, organizing, displaying, and interpreting sets of data.</p> <p>5.13C Graph a given set of data using an appropriate graphical representation such as a picture or line graph</p>	<p>Including but not limited to</p> <ul style="list-style-type: none"> • evaluate a given set of data <ul style="list-style-type: none"> ○ from a table (vertically and horizontally) ○ from set of ordered pairs ○ from within a problem situation ○ from another graphical representation • construct graphs (vertically and horizontally) using appropriate labels, scale and <ul style="list-style-type: none"> ○ key such as ○ pictographs ○ bar graphs ○ line graphs ○ double bar graphs • justify selection of graphical representation using appropriate mathematical • vocabulary for the given data • evaluate numerous graphical representations of the same data to select the best representation 		<p><u>Whole Group Lessons</u></p> <p><u>Envision</u> Topic 19 Lessons 2, 3, and 6</p> <p><u>Small Group Lessons/Centers</u></p> <p><u>A.I.R.R</u> (Addendum) Favorite DVD Movie Rentals #37 Make a Picture #38 Line Graphs #39 Finish Line Graphs #40</p> <p><u>Kamico</u> Good Grief – It’s a Graph page 341</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>5.14C 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"> • Solve problems by making, reading, and analyzing a graph 		<p><u>Whole Group Lessons</u></p> <p><u>Envision</u> Topic 20 Lesson 4</p> <p><u>Small Group Lessons/Centers</u></p> <p><u>Kamico</u> Problem Solvers page 384</p>
<p>5.15 The student communicates about Grade 5 mathematics using informal language.</p> <p>5.15A Explain and record observations using objects, words, pictures, numbers, and technology.</p>	<p>Including but not limited to</p> <ul style="list-style-type: none"> • analyze and draw conclusions based on data collected and created in lesson 		<p>Technology: The Graph Club/EXCEL</p>