ReadyMade™ Fractions 2

correlated to

Florida's Sunshine State Standards

2nd Grade

Strand A: Number Sense, Concepts, and Operations

Benchmark MA.A.1.1.3: The student uses objects to represent whole numbers or commonly used fractions and relates these numbers to real-world situations.

2. represents, compares, and explains halves, thirds, quarters, and eighths as part of a whole and part of a set, using concrete materials and drawings.

Adding Fractions: Level 1 – Pictures and Fraction Symbols. In this activity, students will be matching fraction pictures to fraction symbols, thus illustrating a given equation that adds fractions.

Adding Fractions: Level 2 – Common Denominators. In this activity, students will be given two fraction bars with the same denominator. They will add the numerators and show their answer on a third fraction bar.

Adding Fractions: Level 3 – Mixed Denominators. In this activity, students will be adding two fractions with different denominators. They will use fraction bars to help them find the lowest common denominator and then to solve the problem.

Adding Fractions: Level 4 – Word Problems. In this activity, students will be reading word problems and creating fraction bars to show both the problem and its solution.

Adding Fractions: Level 5 – Word Problems and Lowest Common Denominators. In this activity, students will read a series of word problems. The fractions in the word problems will have different denominators. Students will use fraction bars to represent the fractions, convert them to fractions with common denominators, and show their answer.

Subtracting Fractions: Level 1 – Pictures and Fraction Symbols. In this activity, students will be matching fraction pictures to fraction symbols, thus illustrating a given
equation that subtracts fractions. Subtraction problems use halves, thirds, quarters, sixths, and eighths.

Subtracting Fractions: Level 2 – Common Denominators. In this activity, students will be given two fraction bars with the same denominator. They will subtract the numerators and show their answer on a third fraction bar.

Subtracting Fractions: Level 3 – Mixed Denominators. In this activity, students will be subtracting two fractions with different denominators. They will use fraction bars to help them find the lowest common denominator and then to solve the problem.

Subtracting Fractions: Level 4 – Word Problems and Lowest Common Denominators. In this activity, students will be reading word problems with common denominators, creating fraction bars to show the problem, subtracting, and creating a fraction
bar to show the solution to the problem.

Subtracting Fractions: Level 5 – Word Problems, Answer in Lowest Terms . In this activity, students will create fraction bars to show the equation presented in a subtraction word problem. They will then create another fraction bar that shows the answer in lowest terms.

Rounding Fractions: Level 1 – Half or Whole. In this activity, students will be deciding whether they need a whole or a half of a particular food item. This decision involves rounding. In this activity, students will be rounding to the nearest half or whole.

Rounding Fractions: Level 2 – Nearest Half. In this activity, students will be rounding to the nearest half. They will be deciding if a fraction bar is closer to 0, to 1 / 2, or to 1 whole.

Rounding Fractions: Level 3 – Adding a Fraction Bar. In this activity, students create a fraction bar described in the problem. They decide whether the fraction is closer to 0, to 1/2, or 1 and use numbers at the bottom to insert their answer.

Rounding Fractions: Level 4 – Nearest Tenth. In this activity, students round given fractions to the nearest tenth. They can use the tenths fraction bar provided on the page and the comparison bar to check their work. Problems 1–5 involve addition; problems 6–10 involve subtraction.

Rounding Fractions: Level 5 – Word Problems. In this activity, students read word problems that ask them to round given fractions to the nearest appropriate unit. They place fraction bars on the page and use the comparison bar to check their work.

Fractions and Decimals: Level 1 – Fraction Bar and Counting Box. Both fractions and decimals show parts of a whole. In this activity students create fraction bars to represent the filled area of a decimal grid or fill a decimal grid to be equivalent to a fraction bar.

Fractions and Decimals: Level 2 – Fraction Bars and Counting Box. Fractions can also be represented as decimals. In this activity, students move fraction bars to match the correct decimal equivalent. They can use the Counting Box to check their work.

Fractions and Decimals: Level 3 – Writing Decimal Equivalents. Fractions can also be represented as decimals. In this activity, students use numbers to write the correct decimal equivalent. They can use the Counting Box to check their work.

Fractions and Decimals: Level 4 – Making Fraction Equivalents. Decimals can be represented as fractions. Students will make the fraction bars that are equivalent to given decimal amounts. They can move the fraction to the Counting Box to check their work.

Fractions and Decimals: Level 5 – Word Problems. Fractions can be represented as decimals. In this activity students will read a problem and create a fraction bar to answer the question. Then they use a Counting Box to find the decimal equivalent.

Data Analysis: Level 1 – Graphing and Fractions. Fraction bars can be used to show the results of repeating an event such as flipping a coin. In this activity, students will be asked create data by flipping a coin or spinning a spinner. Then they report the results of the event using fraction bars.

Data Analysis: Level 2: Reporting with Fractions. Fraction bars can be used to show the results of repeating an event such as flipping a coin. In this activity, students will be asked create data by flipping a coin or spinning a spinner. Then they report the results of the event using fraction bars.

Data Analysis: Level 3: Fractions, Decimals, Percentages. Percentage Fraction bars can be used to illustrate the results of the coin flipping. The same results can be reported as
percentages. In this activity, students will create a set of data and report it both as fractions and as percents.

Data Analysis: Level 4: Reporting Survey Results. In this activity, students will be looking at pictographs of survey information and reporting the results of the surveys as fractions and percents. The last three problems invite students to make their own surveys and report the results.

Data Analysis: Level 5: Word Problems. In this activity, students will be reading word problems and solving the problems by using fractions, decimals, and percentages.

3. uses concrete materials to compare fractions in real-life situations.

Adding Fractions: Level 4 – Word Problems. In this activity, students will be reading word problems and creating fraction bars to show both the problem and its solution.

Adding Fractions: Level 5 – Word Problems and Lowest Common Denominators. In this activity, students will read a series of word problems. The fractions in the word problems will have different denominators. Students will use fraction bars to represent the fractions, convert them to fractions with common denominators, and show their answer.

Subtracting Fractions: Level 4 – Word Problems and Lowest Common Denominators. In this activity, students will be reading word problems with common denominators, creating fraction bars to show the problem, subtracting, and creating a fraction
bar to show the solution to the problem.

Subtracting Fractions: Level 5 – Word Problems, Answer in Lowest Terms . In this activity, students will create fraction bars to show the equation presented in a subtraction word problem. They will then create another fraction bar that shows the answer in lowest terms.

Rounding Fractions: Level 5 – Word Problems. In this activity, students read word problems that ask them to round given fractions to the nearest appropriate unit. They place fraction bars on the page and use the comparison bar to check their work.

Fractions and Decimals: Level 5 – Word Problems. Fractions can be represented as decimals. In this activity students will read a problem and create a fraction bar to answer the question. Then they use a Counting Box to find the decimal equivalent.

Data Analysis: Level 5: Word Problems. In this activity, students will be reading word problems and solving the problems by using fractions, decimals, and percentages.

4. knows that the total of equivalent fractional parts makes a whole (for example, eight eighths equal one whole).

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Adding Fractions: Level 2 – Common Denominators. In this activity, students will be given two fraction bars with the same denominator. They will add the numerators and show their answer on a third fraction bar.

Adding Fractions: Level 3 – Mixed Denominators. In this activity, students will be adding two fractions with different denominators. They will use fraction bars to help them find the lowest common denominator and then to solve the problem.

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Rounding Fractions: Level 3 – Adding a Fraction Bar. In this activity, students create a fraction bar described in the problem. They decide whether the fraction is closer to 0, to 1/2, or 1 and use numbers at the bottom to insert their answer.

Rounding Fractions: Level 4 – Nearest Tenth. In this activity, students round given fractions to the nearest tenth. They can use the tenths fraction bar provided on the page and the comparison bar to check their work. Problems 1–5 involve addition; problems 6–10 involve subtraction.

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Fractions and Decimals: Level 1 – Fraction Bar and Counting Box. Both fractions and decimals show parts of a whole. In this activity students create fraction bars to represent the filled area of a decimal grid or fill a decimal grid to be equivalent to a fraction bar.

Fractions and Decimals: Level 2 – Fraction Bars and Counting Box. Fractions can also be represented as decimals. In this activity, students move fraction bars to match the correct decimal equivalent. They can use the Counting Box to check their work.

Fractions and Decimals: Level 3 – Writing Decimal Equivalents. Fractions can also be represented as decimals. In this activity, students use numbers to write the correct decimal equivalent. They can use the Counting Box to check their work.

Fractions and Decimals: Level 4 – Making Fraction Equivalents. Decimals can be represented as fractions. Students will make the fraction bars that are equivalent to given decimal amounts. They can move the fraction to the Counting Box to check their work.

Fractions and Decimals: Level 5 – Word Problems. Fractions can be represented as decimals. In this activity students will read a problem and create a fraction bar to answer the question. Then they use a Counting Box to find the decimal equivalent.

Data Analysis: Level 1 – Graphing and Fractions. Fraction bars can be used to show the results of repeating an event such as flipping a coin. In this activity, students will be asked create data by flipping a coin or spinning a spinner. Then they report the results of the event using fraction bars.

Data Analysis: Level 2: Reporting with Fractions. Fraction bars can be used to show the results of repeating an event such as flipping a coin. In this activity, students will be asked create data by flipping a coin or spinning a spinner. Then they report the results of the event using fraction bars.

Data Analysis: Level 3: Fractions, Decimals, Percentages. Percentage Fraction bars can be used to illustrate the results of the coin flipping. The same results can be reported as percentages. In this activity, students will create a set of data and report it both as fractions and as percents.

Data Analysis: Level 4: Reporting Survey Results. In this activity, students will be looking at pictographs of survey information and reporting the results of the surveys as fractions and percents. The last three problems invite students to make their own surveys and report the results.

Data Analysis: Level 5: Word Problems. In this activity, students will be reading word problems and solving the problems by using fractions, decimals, and percentages.

3rd Grade

Strand A: Number Sense, Concepts, and Operations

Standard 1: The student understands the different ways numbers are represented and used in the real world.

Benchmark MA.A.1.2.1: The student names whole numbers combining 3-digit numeration (hundreds, tens, ones) and the use of number periods, such as ones, thousands, and millions and associates verbal names, written word names, and standard numerals with whole numbers, commonly used fractions, decimals, and percents.

2. reads, writes, and identifies proper fractions with denominators including 2, 3, 4, 5, 6, 8, 10, and 100.

Adding Fractions: Level 1 – Pictures and Fraction Symbols. In this activity, students will be matching fraction pictures to fraction symbols, thus illustrating a given equation that adds fractions.

Adding Fractions: Level 2 – Common Denominators. In this activity, students will be given two fraction bars with the same denominator. They will add the numerators and show their answer on a third fraction bar.

Adding Fractions: Level 3 – Mixed Denominators. In this activity, students will be adding two fractions with different denominators. They will use fraction bars to help them find the lowest common denominator and then to solve the problem.

Adding Fractions: Level 4 – Word Problems. In this activity, students will be reading word problems and creating fraction bars to show both the problem and its solution.

Adding Fractions: Level 5 – Word Problems and Lowest Common Denominators. In this activity, students will read a series of word problems. The fractions in the word problems will have different denominators. Students will use fraction bars to represent the fractions, convert them to fractions with common denominators, and show their answer.

Subtracting Fractions: Level 1 – Pictures and Fraction Symbols. In this activity, students will be matching fraction pictures to fraction symbols, thus illustrating a given
equation that subtracts fractions. Subtraction problems use halves, thirds, quarters, sixths, and eighths.

Subtracting Fractions: Level 2 – Common Denominators. In this activity, students will be given two fraction bars with the same denominator. They will subtract the numerators and show their answer on a third fraction bar.

Subtracting Fractions: Level 3 – Mixed Denominators. In this activity, students will be subtracting two fractions with different denominators. They will use fraction bars to help them find the lowest common denominator and then to solve the problem.

Subtracting Fractions: Level 4 – Word Problems and Lowest Common Denominators. In this activity, students will be reading word problems with common denominators, creating fraction bars to show the problem, subtracting, and creating a fraction
bar to show the solution to the problem.

Subtracting Fractions: Level 5 – Word Problems, Answer in Lowest Terms . In this activity, students will create fraction bars to show the equation presented in a subtraction word problem. They will then create another fraction bar that shows the answer in lowest terms.

Rounding Fractions: Level 1 – Half or Whole. In this activity, students will be deciding whether they need a whole or a half of a particular food item. This decision involves rounding. In this activity, students will be rounding to the nearest half or whole.

Rounding Fractions: Level 2 – Nearest Half. In this activity, students will be rounding to the nearest half. They will be deciding if a fraction bar is closer to 0, to 1 / 2, or to 1 whole.

Rounding Fractions: Level 3 – Adding a Fraction Bar. In this activity, students create a fraction bar described in the problem. They decide

whether the fraction is closer to 0, to 1/2, or 1 and use numbers at the bottom to insert their answer.

Rounding Fractions: Level 4 – Nearest Tenth. In this activity, students round given fractions to the nearest tenth. They can use the tenths fraction bar provided on the page and the comparison bar to check their work. Problems 1–5 involve addition; problems 6–10 involve subtraction.

Rounding Fractions: Level 5 – Word Problems. In this activity, students read word problems that ask them to round given fractions to the nearest appropriate unit. They place fraction bars on the page and use the comparison bar to check their work.

Fractions and Decimals: Level 1 – Fraction Bar and Counting Box. Both fractions and decimals show parts of a whole. In this activity students create fraction bars to represent the filled area of a decimal grid or fill a decimal grid to be equivalent to a fraction bar.

Fractions and Decimals: Level 2 – Fraction Bars and Counting Box. Fractions can also be represented as decimals. In this activity, students move fraction bars to match the
correct decimal equivalent. They can use the Counting Box to check their work.

Fractions and Decimals: Level 3 – Writing Decimal Equivalents. Fractions can also be represented as decimals. In this activity, students use numbers to write the correct decimal equivalent. They can use the Counting Box to check their work.

Fractions and Decimals: Level 4 – Making Fraction Equivalents. Decimals can be represented as fractions. Students will make the fraction bars that are equivalent to given decimal amounts. They can move the fraction to the Counting Box to check their work.

Fractions and Decimals: Level 5 – Word Problems. Fractions can be represented as decimals. In this activity students will read a problem and create a fraction bar to answer the question. Then they use a Counting Box to find the decimal equivalent.

Data Analysis: Level 1 – Graphing and Fractions. Fraction bars can be used to show the results of repeating an event such as flipping a coin. In this activity, students will be asked create data by flipping a coin or spinning a spinner. Then they report the results
of the event using fraction bars.

Data Analysis: Level 2: Reporting with Fractions. Fraction bars can be used to show the results of repeating an event such as flipping a coin. In this activity, students will be asked create data by flipping a coin or spinning a spinner. Then they report the results of the event using fraction bars.

Data Analysis: Level 3: Fractions, Decimals, Percentages. Percentage Fraction bars can be used to illustrate the results of the coin flipping. The same results can be reported as
percentages. In this activity, students will create a set of data and report it both as fractions and as percents.

Data Analysis: Level 4: Reporting Survey Results. In this activity, students will be looking at pictographs of survey information and reporting the results of the surveys as fractions and percents. The last three problems invite students to make their own surveys and report the results.

Data Analysis: Level 5: Word Problems. In this activity, students will be reading word problems and solving the problems by using fractions, decimals, and percentages.

Benchmark MA.A.1.2.4: The student understands that numbers can be represented in a variety of equivalent forms using whole numbers, decimals, fractions, and percents.

1. uses concrete materials to model equivalent forms of whole numbers and common fractions.

Fractions and Decimals: Level 1 – Fraction Bar and Counting Box. Both fractions and decimals show parts of a whole. In this activity students create fraction bars to represent the filled area of a decimal grid or fill a decimal grid to be equivalent to a fraction bar.

Fractions and Decimals: Level 2 – Fraction Bars and Counting Box. Fractions can also be represented as decimals. In this activity, students move fraction bars to match the
correct decimal equivalent. They can use the Counting Box to check their work.

Fractions and Decimals: Level 3 – Writing Decimal Equivalents. Fractions can also be represented as decimals. In this activity, students use numbers to write the correct decimal equivalent. They can use the Counting Box to check their work.

Fractions and Decimals: Level 4 – Making Fraction Equivalents. Decimals can be represented as fractions. Students will make the fraction bars that are equivalent to given decimal amounts. They can move the fraction to the Counting Box to check their work.

Fractions and Decimals: Level 5 – Word Problems. Fractions can be represented as decimals. In this activity students will read a problem and create a fraction bar to answer the question. Then they use a Counting Box to find the decimal equivalent.

Data Analysis: Level 3: Fractions, Decimals, Percentages. Percentage Fraction bars can be used to illustrate the results of the coin flipping. The same results can be reported as
percentages. In this activity, students will create a set of data and report it both as fractions and as percents.

Data Analysis: Level 4: Reporting Survey Results. In this activity, students will be looking at pictographs of survey information and reporting the results of the surveys as fractions and percents. The last three problems invite students to make their own surveys and report the results.

Data Analysis: Level 5: Word Problems. In this activity, students will be reading word problems and solving the problems by using fractions, decimals, and percentages.

2. identifies equivalent forms of numbers.

Fractions and Decimals: Level 1 – Fraction Bar and Counting Box. Both fractions and decimals show parts of a whole. In this activity students create fraction bars to represent the filled area of a decimal grid or fill a decimal grid to be equivalent to a fraction bar.

Fractions and Decimals: Level 2 – Fraction Bars and Counting Box. Fractions can also be represented as decimals. In this activity, students move fraction bars to match the
correct decimal equivalent. They can use the Counting Box to check their work.

Fractions and Decimals: Level 3 – Writing Decimal Equivalents. Fractions can also be represented as decimals. In this activity, students use numbers to write the correct decimal equivalent. They can use the Counting Box to check their work.

Fractions and Decimals: Level 4 – Making Fraction Equivalents. Decimals can be represented as fractions. Students will make the fraction bars that are equivalent to given decimal amounts. They can move the fraction to the Counting Box to check their work.

Fractions and Decimals: Level 5 – Word Problems. Fractions can be represented as decimals. In this activity students will read a problem and create a fraction bar to answer the question. Then they use a Counting Box to find the decimal equivalent.

Data Analysis: Level 3: Fractions, Decimals, Percentages. Percentage Fraction bars can be used to illustrate the results of the coin flipping. The same results can be reported as
percentages. In this activity, students will create a set of data and report it both as fractions and as percents.

Data Analysis: Level 4: Reporting Survey Results. In this activity, students will be looking at pictographs of survey information and reporting the results of the surveys as fractions and percents. The last three problems invite students to make their own surveys and report the results.

Data Analysis: Level 5: Word Problems. In this activity, students will be reading word problems and solving the problems by using fractions, decimals, and percentages.

Strand E: Data Analysis and Probability

Standard 1: The student understands and uses the tools of data analysis for managing information.

Benchmark MA.E.1.2.1: The student solves problems by generating, collecting, organizing, displaying, and analyzing data using histograms, bar graphs, circle graphs, line graphs, pictographs, and charts.

3. generates questions, collects responses, and displays data in a table, pictograph or bar graph.

Data Analysis: Level 4: Reporting Survey Results. In this activity, students will be looking at pictographs of survey information and reporting the results of the surveys as fractions and percents. The last three problems invite students to make their own surveys and report the results.

Standard 2: The student identifies patterns and makes predictions from an orderly display of data using concepts of probability and statistics.

Benchmark MA.E.2.2.2: The student predicts the likelihood of simple events occurring.

1. identifies and records the possible outcomes of simple experiments using concrete materials (for example, spinners, marbles in a bag, coin toss).

Data Analysis: Level 1 – Graphing and Fractions. Fraction bars can be used to show the results of repeating an event such as flipping a coin. In this activity, students will be asked create data by flipping a coin or spinning a spinner. Then they report the results of the event using fraction bars.

Data Analysis: Level 2: Reporting with Fractions. Fraction bars can be used to show the results of repeating an event such as flipping a coin. In this activity, students will be asked create data by flipping a coin or spinning a spinner. Then they report the results of the event using fraction bars.

Data Analysis: Level 3: Fractions, Decimals, Percentages. Percentage Fraction bars can be used to illustrate the results of the coin flipping. The same results can be reported as percentages. In this activity, students will create a set of data and report it both as fractions and as percents.

Standard 3: The student uses statistical methods to make inferences and valid arguments about real-world situations.

Benchmark MA.E.3.2.1: The student designs experiments to answer class or personal questions, collects information, and interprets the results using statistics (range, mean, median, and mode) and pictographs, charts, bar graphs, circle graphs, and line graphs.

1. designs appropriate questions for a survey.

Data Analysis: Level 4: Reporting Survey Results. In this activity, students will be looking at pictographs of survey information and reporting the results of the surveys as fractions and percents. The last three problems invite students to make their own surveys and report the results.

2. creates a pictograph or bar graph to present data from a given survey.

Data Analysis: Level 4: Reporting Survey Results. In this activity, students will be looking at pictographs of survey information and reporting the results of the surveys as fractions and percents. The last three problems invite students to make their own surveys and report the results.

3. explains the results from the data of a given survey.

Data Analysis: Level 4: Reporting Survey Results. In this activity, students will be looking at pictographs of survey information and reporting the results of the surveys as fractions and percents. The last three problems invite students to make their own surveys and report the results.

4th Grade

Strand A: Number Sense, Concepts, and Operations

Standard 1: The student understands the different ways numbers are represented and used in the real world.

Benchmark MA.A.1.2.1: The student names whole numbers combining 3-digit numeration (hundreds, tens, ones) and the use of number periods, such as ones, thousands, and millions and associates verbal names, written word names, and standard numerals with whole numbers, commonly used fractions, decimals, and percents.

2. reads, writes, and identifies fractions and mixed numbers with denominators including 2, 3, 4, 5, 6, 8, 10, 12, 20, 25, 100, and 1000.

Adding Fractions: Level 1 – Pictures and Fraction Symbols. In this activity, students will be matching fraction pictures to fraction symbols, thus illustrating a given equation that adds fractions.

Adding Fractions: Level 2 – Common Denominators. In this activity, students will be given two fraction bars with the same denominator. They will add the numerators and show their answer on a third fraction bar.

Adding Fractions: Level 3 – Mixed Denominators. In this activity, students will be adding two fractions with different denominators. They will use fraction bars to help them find the lowest common denominator and then to solve the problem.

Adding Fractions: Level 4 – Word Problems. In this activity, students will be reading word problems and creating fraction bars to show both the problem and its solution.

Adding Fractions: Level 5 – Word Problems and Lowest Common Denominators. In this activity, students will read a series of word problems. The fractions in the word problems will have different denominators. Students will use fraction bars to represent the fractions, convert them to fractions with common denominators, and show their answer.

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equation that subtracts fractions. Subtraction problems use halves, thirds, quarters, sixths, and eighths.

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Rounding Fractions: Level 1 – Half or Whole. In this activity, students will be deciding whether they need a whole or a half of a particular food item. This decision involves rounding. In this activity, students will be rounding to the nearest half or whole.

Rounding Fractions: Level 2 – Nearest Half. In this activity, students will be rounding to the nearest half. They will be deciding if a fraction bar is closer to 0, to 1 / 2, or to 1 whole.

Rounding Fractions: Level 3 – Adding a Fraction Bar. In this activity, students create a fraction bar described in the problem. They decide whether the fraction is closer to 0, to 1/2, or 1 and use numbers at the bottom to insert their answer.

Rounding Fractions: Level 4 – Nearest Tenth. In this activity, students round given fractions to the nearest tenth. They can use the tenths fraction bar provided on the page and the comparison bar to check their work. Problems 1–5 involve addition; problems 6–10 involve subtraction.

Rounding Fractions: Level 5 – Word Problems. In this activity, students read word problems that ask them to round given fractions to the nearest appropriate unit. They place fraction bars on the page and use the comparison bar to check their work.

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correct decimal equivalent. They can use the Counting Box to check their work.

Fractions and Decimals: Level 3 – Writing Decimal Equivalents. Fractions can also be represented as decimals. In this activity, students use numbers to write the correct decimal equivalent. They can use the Counting Box to check their work.

Fractions and Decimals: Level 4 – Making Fraction Equivalents. Decimals can be represented as fractions. Students will make the fraction bars that are equivalent to given decimal amounts. They can move the fraction to the Counting Box to check their work.

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Data Analysis: Level 2: Reporting with Fractions. Fraction bars can be used to show the results of repeating an event such as flipping a coin. In this activity, students will be asked create data by flipping a coin or spinning a spinner. Then they report the results of the event using fraction bars.

Data Analysis: Level 3: Fractions, Decimals, Percentages. Percentage Fraction bars can be used to illustrate the results of the coin flipping. The same results can be reported as percentages. In this activity, students will create a set of data and report it both as fractions and as percents.

Data Analysis: Level 4: Reporting Survey Results. In this activity, students will be looking at pictographs of survey information and reporting the results of the surveys as fractions and percents. The last three problems invite students to make their own surveys and report the results.

Data Analysis: Level 5: Word Problems. In this activity, students will be reading word problems and solving the problems by using fractions, decimals, and percentages.

3. reads, writes, and identifies decimals through hundredths.

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numbers to write the correct decimal equivalent. They can use the Counting Box to check their work.

Fractions and Decimals: Level 4 – Making Fraction Equivalents. Decimals can be represented as fractions. Students will make the fraction bars that are equivalent to given decimal amounts. They can move the fraction to the Counting Box to check their work.

Fractions and Decimals: Level 5 – Word Problems. Fractions can be represented as decimals. In this activity students will read a problem and create a fraction bar to answer the question. Then they use a Counting Box to find the decimal equivalent.

Data Analysis: Level 3: Fractions, Decimals, Percentages. Percentage Fraction bars can be used to illustrate the results of the coin flipping. The same results can be reported as
percentages. In this activity, students will create a set of data and report it both as fractions and as percents.

Data Analysis: Level 4: Reporting Survey Results. In this activity, students will be looking at pictographs of survey information and reporting the results of the surveys as fractions and percents. The last three problems invite students to make their own surveys and report the results.

Data Analysis: Level 5: Word Problems. In this activity, students will be reading word problems and solving the problems by using fractions, decimals, and percentages.

Benchmark MA.A.1.2.3: The student understands concrete and symbolic representations of whole numbers, fractions, decimals, and percents in real-world situations.

1. translates problem situations into diagrams and models using whole numbers, fractions, mixed numbers and decimals to hundredths including money notation.

Data Analysis: Level 1 – Graphing and Fractions. Fraction bars can be used to show the results of repeating an event such as flipping a coin. In this activity, students will be asked create data by flipping a coin or spinning a spinner. Then they report the results
of the event using fraction bars.

Data Analysis: Level 2: Reporting with Fractions. Fraction bars can be used to show the results of repeating an event such as flipping a coin. In this activity, students will be asked create data by flipping a coin or spinning a spinner. Then they report the results of the event using fraction bars.

Data Analysis: Level 3: Fractions, Decimals, Percentages. Percentage Fraction bars can be used to illustrate the results of the coin flipping. The same results can be reported as
percentages. In this activity, students will create a set of data and report it both as fractions and as percents.

Data Analysis: Level 4: Reporting Survey Results. In this activity, students will be looking at pictographs of survey information and reporting the results of the surveys as fractions and percents. The last three problems invite students to make their own surveys and report the results.

Benchmark MA.A.1.2.4: The student understands that numbers can be represented in a variety of equivalent forms using whole numbers, decimals, fractions, and percents.

1. uses concrete materials to model equivalent forms of whole numbers, fractions, and decimals.

Fractions and Decimals: Level 1 – Fraction Bar and Counting Box. Both fractions and decimals show parts of a whole. In this activity students create fraction bars to represent the filled area of a decimal grid or fill a decimal grid to be equivalent to a fraction bar.

Fractions and Decimals: Level 2 – Fraction Bars and Counting Box. Fractions can also be represented as decimals. In this activity, students move fraction bars to match the
correct decimal equivalent. They can use the Counting Box to check their work.

Fractions and Decimals: Level 3 – Writing Decimal Equivalents. Fractions can also be represented as decimals. In this activity, students use numbers to write the correct decimal equivalent. They can use the Counting Box to check their work.

Fractions and Decimals: Level 4 – Making Fraction Equivalents. Decimals can be represented as fractions. Students will make the fraction

bars that are equivalent to given decimal amounts. They can move the fraction to the Counting Box to check their work.

Fractions and Decimals: Level 5 – Word Problems. Fractions can be represented as decimals. In this activity students will read a problem and create a fraction bar to answer the question. Then they use a Counting Box to find the decimal equivalent.

Data Analysis: Level 3: Fractions, Decimals, Percentages. Percentage Fraction bars can be used to illustrate the results of the coin flipping. The same results can be reported as
percentages. In this activity, students will create a set of data and report it both as fractions and as percents.

Data Analysis: Level 4: Reporting Survey Results. In this activity, students will be looking at pictographs of survey information and reporting the results of the surveys as fractions and percents. The last three problems invite students to make their own surveys and report the results.

Data Analysis: Level 5: Word Problems. In this activity, students will be reading word problems and solving the problems by using fractions, decimals, and percentages.

2. identifies equivalent forms of numbers.

Fractions and Decimals: Level 1 – Fraction Bar and Counting Box. Both fractions and decimals show parts of a whole. In this activity students create fraction bars to represent the filled area of a decimal grid or fill a decimal grid to be equivalent to a fraction bar.

Fractions and Decimals: Level 2 – Fraction Bars and Counting Box. Fractions can also be represented as decimals. In this activity, students move fraction bars to match the
correct decimal equivalent. They can use the Counting Box to check their work.

Fractions and Decimals: Level 3 – Writing Decimal Equivalents. Fractions can also be represented as decimals. In this activity, students use numbers to write the correct decimal equivalent. They can use the Counting Box to check their work.

Fractions and Decimals: Level 4 – Making Fraction Equivalents. Decimals can be represented as fractions. Students will make the fraction

bars that are equivalent to given decimal amounts. They can move the fraction to the Counting Box to check their work.

Fractions and Decimals: Level 5 – Word Problems. Fractions can be represented as decimals. In this activity students will read a problem and create a fraction bar to answer the question. Then they use a Counting Box to find the decimal equivalent.

Data Analysis: Level 3: Fractions, Decimals, Percentages. Percentage Fraction bars can be used to illustrate the results of the coin flipping. The same results can be reported as
percentages. In this activity, students will create a set of data and report it both as fractions and as percents.

Data Analysis: Level 4: Reporting Survey Results. In this activity, students will be looking at pictographs of survey information and reporting the results of the surveys as fractions and percents. The last three problems invite students to make their own surveys and report the results.

Data Analysis: Level 5: Word Problems. In this activity, students will be reading word problems and solving the problems by using fractions, decimals, and percentages.

3. knows that two numbers in different forms are equivalent or non-equivalent, using whole numbers, decimals, fractions, and mixed numbers.

Fractions and Decimals: Level 1 – Fraction Bar and Counting Box. Both fractions and decimals show parts of a whole. In this activity students create fraction bars to represent the filled area of a decimal grid or fill a decimal grid to be equivalent to a fraction bar.

Fractions and Decimals: Level 2 – Fraction Bars and Counting Box. Fractions can also be represented as decimals. In this activity, students move fraction bars to match the
correct decimal equivalent. They can use the Counting Box to check their work.

Fractions and Decimals: Level 3 – Writing Decimal Equivalents. Fractions can also be represented as decimals. In this activity, students use numbers to write the correct decimal equivalent. They can use the Counting Box to check their work.

Fractions and Decimals: Level 4 – Making Fraction Equivalents. Decimals can be represented as fractions. Students will make the fraction

bars that are equivalent to given decimal amounts. They can move the fraction to the Counting Box to check their work.

Fractions and Decimals: Level 5 – Word Problems. Fractions can be represented as decimals. In this activity students will read a problem and create a fraction bar to answer the question. Then they use a Counting Box to find the decimal equivalent.

Data Analysis: Level 3: Fractions, Decimals, Percentages. Percentage Fraction bars can be used to illustrate the results of the coin flipping. The same results can be reported as
percentages. In this activity, students will create a set of data and report it both as fractions and as percents.

Data Analysis: Level 4: Reporting Survey Results. In this activity, students will be looking at pictographs of survey information and reporting the results of the surveys as fractions and percents. The last three problems invite students to make their own surveys and report the results.

Data Analysis: Level 5: Word Problems. In this activity, students will be reading word problems and solving the problems by using fractions, decimals, and percentages.

Standard 3: The student understands the effects of operations on numbers and the relationship among these operations, selects appropriate operations, and computes for problem solving.

Benchmark MA.A.3.2.1: The student understands and explains the effects of addition, subtraction, and multiplication on whole numbers, decimals, and fractions, including mixed numbers, and the effects of division on whole numbers, including the inverse relationship of multiplication and division.

4. explains and demonstrates the addition and subtraction of common fractions using concrete materials, drawings, story problems, and algorithms.

Adding Fractions: Level 1 – Pictures and Fraction Symbols. In this activity, students will be matching fraction pictures to fraction symbols, thus illustrating a given equation that adds fractions.

Adding Fractions: Level 2 – Common Denominators. In this activity, students will be given two fraction bars with the same denominator. They will add the numerators and show their answer on a third fraction bar.

Adding Fractions: Level 3 – Mixed Denominators. In this activity, students will be adding two fractions with different denominators. They will use fraction bars to help them find the lowest common denominator and then to solve the problem.

Adding Fractions: Level 4 – Word Problems. In this activity, students will be reading word problems and creating fraction bars to show both the problem and its solution.

Adding Fractions: Level 5 – Word Problems and Lowest Common Denominators. In this activity, students will read a series of word problems. The fractions in the word problems will have different denominators. Students will use fraction bars to represent the fractions, convert them to fractions with common denominators, and show their answer.

Subtracting Fractions: Level 1 – Pictures and Fraction Symbols. In this activity, students will be matching fraction pictures to fraction symbols, thus illustrating a given
equation that subtracts fractions. Subtraction problems use halves, thirds, quarters, sixths, and eighths.

Subtracting Fractions: Level 2 – Common Denominators. In this activity, students will be given two fraction bars with the same denominator. They will subtract the numerators and show their answer on a third fraction bar.

Subtracting Fractions: Level 3 – Mixed Denominators. In this activity, students will be subtracting two fractions with different denominators. They will use fraction bars to help them find the lowest common denominator and then to solve the problem.

Subtracting Fractions: Level 4 – Word Problems and Lowest Common Denominators. In this activity, students will be reading word problems with common denominators, creating fraction bars to show the problem, subtracting, and creating a fraction
bar to show the solution to the problem.

Subtracting Fractions: Level 5 – Word Problems, Answer in Lowest Terms . In this activity, students will create fraction bars to show the equation presented in a subtraction word problem. They will then create another fraction bar that shows the answer in lowest terms.

Benchmark MA.A.3.2.2: The student selects the appropriate operation to solve specific problems involving addition, subtraction, and multiplication of whole numbers, decimals, and fractions, and division of whole numbers.

1. uses problem-solving strategies to determine the operation(s) needed to solve one- and two-step problems involving addition, subtraction, multiplication, and division of whole numbers, and addition and subtraction of decimals and fractions.

Adding Fractions: Level 4 – Word Problems. In this activity, students will be reading word problems and creating fraction bars to show both the problem and its solution.

Adding Fractions: Level 5 – Word Problems and Lowest Common Denominators. In this activity, students will read a series of word problems. The fractions in the word problems will have different denominators. Students will use fraction bars to represent the fractions, convert them to fractions with common denominators, and show their answer.

Subtracting Fractions: Level 4 – Word Problems and Lowest Common Denominators. In this activity, students will be reading word problems with common denominators, creating fraction bars to show the problem, subtracting, and creating a fraction
bar to show the solution to the problem.

Subtracting Fractions: Level 5 – Word Problems, Answer in Lowest Terms . In this activity, students will create fraction bars to show the equation presented in a subtraction word problem. They will then create another fraction bar that shows the answer in lowest terms.

Benchmark MA.A.3.2.3: The student adds, subtracts, and multiplies whole numbers, decimals, and fractions, including mixed numbers, and divides whole numbers to solve real-world problems, using appropriate methods of computing, such as mental mathematics, paper and pencil, and calculator.

5. solves real-world problems involving the addition or subtraction of decimals (to hundredths) or common fractions with like or unlike denominators.

Adding Fractions: Level 4 – Word Problems. In this activity, students will be reading word problems and creating fraction bars to show both the problem and its solution.

Adding Fractions: Level 5 – Word Problems and Lowest Common Denominators. In this activity, students will read a series of word problems. The fractions in the word problems will have different denominators. Students will use fraction bars to represent the fractions, convert them to fractions with common denominators, and show their answer.

Subtracting Fractions: Level 4 – Word Problems and Lowest Common Denominators. In this activity, students will be reading word problems with common denominators, creating fraction bars to show the problem, subtracting, and creating a fraction
bar to show the solution to the problem.

Subtracting Fractions: Level 5 – Word Problems, Answer in Lowest Terms . In this activity, students will create fraction bars to show the equation presented in a subtraction word problem. They will then create another fraction bar that shows the answer in lowest terms.

Strand E: Data Analysis and Probability

Standard 1: The student understands and uses the tools of data analysis for managing information.

Benchmark MA.E.1.2.1: The student solves problems by generating, collecting, organizing, displaying, and analyzing data using histograms, bar graphs, circle graphs, line graphs, pictographs, and charts.

4. generates questions, collects responses, and displays data on a pictograph, circle graph, bar, double bar, or line graph.

Data Analysis: Level 4: Reporting Survey Results. In this activity, students will be looking at pictographs of survey information and reporting the results of the surveys as fractions and percents. The last three problems invite students to make their own surveys and report the results.

Benchmark MA.E.1.2.3: The student analyzes real-world data to recognize patterns and relationships of the measures of central tendency using tables, charts, histograms, bar graphs, line graphs, pictographs, and circle graphs generated by appropriate technology, including calculators and computers.

2. uses computer applications to examine and evaluate data.

Data Analysis: Level 1 – Graphing and Fractions. Fraction bars can be used to show the results of repeating an event such as flipping a coin. In this activity, students will be asked create data by flipping a coin or spinning a spinner. Then they report the results of the event using fraction bars.

Data Analysis: Level 2: Reporting with Fractions. Fraction bars can be used to show the results of repeating an event such as flipping a coin. In this activity, students will be asked create data by flipping a coin or spinning a spinner. Then they report the results of the event using fraction bars.

Data Analysis: Level 3: Fractions, Decimals, Percentages. Percentage Fraction bars can be used to illustrate the results of the coin flipping. The same results can be reported as percentages. In this activity, students will create a set of data and report it both as fractions and as percents.

Data Analysis: Level 4: Reporting Survey Results. In this activity, students will be looking at pictographs of survey information and reporting the results of the surveys as fractions and percents. The last three problems invite students to make their own surveys and report the results.

Data Analysis: Level 5: Word Problems. In this activity, students will be reading word problems and solving the problems by using fractions, decimals, and percentages.

3. uses computer applications to construct graphs.

Data Analysis: Level 4: Reporting Survey Results. In this activity, students will be looking at pictographs of survey information and reporting the results of the surveys as fractions and percents. The last three problems invite students to make their own surveys and report the results.

Standard 2: The student identifies patterns and makes predictions from an orderly display of data using concepts of probability and statistics.

Benchmark MA.E.2.2.2: The student predicts the likelihood of simple events occurring.

1. identifies and records using common fractions, the possible outcomes of simple experiments using concrete materials (for example, spinners, number cubes, coin toss).

Data Analysis: Level 1 – Graphing and Fractions. Fraction bars can be used to show the results of repeating an event such as flipping a coin. In this activity, students will be asked create data by flipping a coin or spinning a spinner. Then they report the results of the event using fraction bars.

Data Analysis: Level 2: Reporting with Fractions. Fraction bars can be used to show the results of repeating an event such as flipping a coin. In this activity, students will be asked create data by flipping a coin or spinning a spinner. Then they report the results of the event using fraction bars.

Data Analysis: Level 3: Fractions, Decimals, Percentages. Percentage Fraction bars can be used to illustrate the results of the coin flipping. The same results can be reported as percentages. In this activity, students will create a set of data and report it both as fractions and as percents.

Standard 3: The student uses statistical methods to make inferences and valid arguments about real-world situations.

Benchmark MA.E.3.2.1: The student designs experiments to answer class or personal questions, collects information, and interprets the results using statistics (range, mean, median, and mode) and pictographs, charts, bar graphs, circle graphs, and line graphs.

1. designs a class survey to collect data.

Data Analysis: Level 4: Reporting Survey Results. In this activity, students will be looking at pictographs of survey information and reporting the results of the surveys as fractions and percents. The last three problems invite students to make their own surveys and report the results.

2. creates an appropriate graph to display data (for example, pictographs, bar graphs, line graphs, circle graphs).

Data Analysis: Level 4: Reporting Survey Results. In this activity, students will be looking at pictographs of survey information and reporting the results of the surveys as fractions and percents. The last three problems invite students to make their own surveys and report the results.