



# ReadyMade™ Fractions 1

correlated to

## National Council of Teachers of Mathematics: Principles and Standards for School Mathematics

### 3<sup>rd</sup> Grade – 5<sup>th</sup> Grade

#### Number and Operations Standard

**Understand numbers, ways of representing numbers, relationships among numbers, and number systems**

- recognize equivalent representations for the same number and generate them by decomposing and composing numbers

Equivalent Fractions: Level 1 – Matching. In this activity, students will be matching fraction pictures of brownies with numerical symbols. Students will be working with halves, thirds, quarters, sixths, and eighths.

Equivalent Fractions: Level 2 – Using a Comparison Bar. In this activity, students will be given one fraction bar and asked to create a different but equivalent fraction bar. Students will be working with thirds, fourths, fifths, sixths, ninths, twelfths, and twentieths.

Equivalent Fractions: Level 3 – Four Fractions Bar. In this activity, students will be given one fraction bar and asked to create three different but equivalent fraction bars. Students will be given fraction bars showing thirds, fourths, fifths, sixths, ninths, twelfths, and twentieths.

Equivalent Fractions: Level 4 – Fraction Symbols and Fraction Bars. In this activity, students will be given a fraction symbol and asked to make a fraction bar that is different from but equivalent to symbols showing thirds, fourths, fifths, sixths, eighths, tenths, and twelfths.

Equivalent Fractions: Level 5 – Lowest Common Denominator. In this activity, students will create a fraction bar that represents the



object pictured on the page. They will then create an equivalent fraction with the lowest common denominator.

- develop understanding of fractions as parts of unit wholes, as parts of a collection, as locations on number lines, and as divisions of whole numbers

Parts of a Set: Level 1 – Using a Fraction Bar. In this activity, students will use a fraction bar to represent the number of circles in a set that are black. The denominator represents the total number of items in the set. The numerator indicates the number of black circles. Sets contain 5 to 12 objects.

Parts of a Set: Level 2 – Creating a Fraction Bar. In this activity, students create a fraction bar with a denominator that represents the total number of items in the set. Then they will change the numerator to indicate the number of black circles in the set. Sets contain 5 to 12 objects.

Parts of a Set: Level 3 – Two Fraction Bars. In this activity, students create two fraction bars, each with a denominator that represents the total number of items in a set. One of the numerators indicates the number of black circles in the set; the other shows the number of green circles. Sets contain 4 to 16 objects.

Parts of a Set: Level 4 – Creating Sets and Fraction Bars. In this activity, students insert a specific number of green and black circles on the page and then create a fraction bar to show the number of black circles in the set. Sets contain 4 to 16 objects.

Parts of a Set: Level 5 – Word Problems. In this activity, students will read questions about sets of objects. Then they will create a fraction bar to answer the question about the items in the set.

Equivalent Fractions: Level 1 – Matching. In this activity, students will be matching fraction pictures of brownies with numerical symbols. Students will be working with halves, thirds, quarters, sixths, and eighths.

Equivalent Fractions: Level 2 – Using a Comparison Bar. In this activity, students will be given one fraction bar and asked to create a different but equivalent fraction bar. Students will be working with thirds, fourths, fifths, sixths, ninths, twelfths, and twentieths.



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Equivalent Fractions: Level 4 – Fraction Symbols and Fraction Bars. In this activity, students will be given a fraction symbol and asked to make a fraction bar that is different from but equivalent to symbols showing thirds, fourths, fifths, sixths, eighths, tenths, and twelfths.

Equivalent Fractions: Level 5 – Lowest Common Denominator. In this activity, students will create a fraction bar that represents the object pictured on the page. They will then create an equivalent fraction with the lowest common denominator.

Number Line Fractions: Level 1- Measuring to the Nearest Fourth. In this activity, students will be using a number line divided into fourths. They will be given a series of objects and asked to measure each object along the number line, giving their answer to the nearest fourth.

Number Line Fractions: Level 2- Measuring to the Nearest Tenth. In this activity, students will be using a number line divided into tenths. They will be given a series of objects and asked to measure each object along the number line, giving their answer to the nearest tenth.

Number Line Fractions: Level 3 - Comparing Tenths and Fourths. In this activity, students will use two number lines, one divided into fourths and one divided into tenths. They are asked to measure each object along both number lines, decide which number line gives a more accurate measurement, and record that answer.

Number Line Fractions: Level 4 – Addition and Subtraction. In this activity, students will use a number line to help them visualize and understand addition and subtraction of fractions.

Number Line Fractions: Level 5 – Reading Number Lines. In this activity, students will determine into how many fractional parts a number line has been divided. Then they will report the location of an animal on that number line as a fraction.

Comparing Fractions: Level 1 – Using Shapes. In this activity, students will be comparing fractions to decide if one fraction is greater



than ( $>$ ), less than ( $<$ ), or equal to ( $=$ ) a second fraction. Each fraction is expressed as a numerical symbol and as a picture (a circle divided into sections).

Comparing Fractions: Level 2 – Using a Comparison Bar. In this activity, students will be comparing fraction bars to decide whether a fraction is greater than, less than, or equal to a second fraction. They will verify their answer using a comparison bar. Each fraction is expressed as a numerical symbol and as a fraction bar.

Comparing Fractions: Level 3 – Create Fraction Bars. In this activity, students will be deciding if one fraction is greater than, less than, or equal to a second fraction. They will create fraction bars and use comparison bars to show their thinking and verify their answers.

Comparing Fractions: Level 4 – Words and Symbols. In this activity, students will be deciding if one fraction is greater than, less than, or equal to a second fraction. They will create fraction bars and use comparison bars to show their thinking and verify their answers.

Comparing Fractions: Level 5 – Word Problems. In this activity, students will read a series of word problems. The fractions in the word problems include both parts of a whole and parts of a set. They will be deciding if one fraction is greater than, less than, or equal to a second fraction. They will use on-screen manipulatives to show their thinking and verify their answers.

Sorting Fractions: Level 1 – Smallest to Largest Fraction Pictures. In this activity, students will be asked to sort pictures of food that has been divided into fractions. They will move the pan or dish with the smallest fraction to the left and the pan or dish with the largest fraction to the right, matching each to fraction symbols on the page.

Sorting Fractions: Level 2 – Fraction Bars. In this activity, students will be asked to sort fraction bars from the smallest on the left to the largest fraction bar on the right. Problems include fractions with different denominators (from halves to fifths).

Sorting Fractions: Level 3 – Different Denominators. In this activity, students will be asked to sort fraction bars from the smallest on the left to the largest fraction bar on the right. Problems include fractions with different denominators (from halves to twenty-fifths).



Sorting Fractions: Level 4 – Fraction Symbols. In this activity, students will be asked to sort fraction symbols, from the smallest on the left to the largest fraction symbol on the right. Fractions will usually have different denominators (from halves to twelfths).

Sorting Fractions: Level 5 – Pictures and Fraction Bars. In this activity, students will be asked to sort fraction pictures, from the smallest on the left to the largest fraction pictures on the right. Fractions will usually have different denominators (from thirds to twelfths). Students are encouraged to create fraction bars to check their work.

- use models, benchmarks, and equivalent forms to judge the size of fractions

Parts of a Set: Level 1 – Using a Fraction Bar. In this activity, students will use a fraction bar to represent the number of circles in a set that are black. The denominator represents the total number of items in the set. The numerator indicates the number of black circles. Sets contain 5 to 12 objects.

Parts of a Set: Level 2 – Creating a Fraction Bar. In this activity, students create a fraction bar with a denominator that represents the total number of items in the set. Then they will change the numerator to indicate the number of black circles in the set. Sets contain 5 to 12 objects.

Parts of a Set: Level 3 – Two Fraction Bars. In this activity, students create two fraction bars, each with a denominator that represents the total number of items in a set. One of the numerators indicates the number of black circles in the set; the other shows the number of green circles. Sets contain 4 to 16 objects.

Parts of a Set: Level 4 – Creating Sets and Fraction Bars. In this activity, students insert a specific number of green and black circles on the page and then create a fraction bar to show the number of black circles in the set. Sets contain 4 to 16 objects.

Parts of a Set: Level 5 – Word Problems. In this activity, students will read questions about sets of objects. Then they will create a fraction bar to answer the question about the items in the set.

Equivalent Fractions: Level 1 – Matching. In this activity, students will be matching fraction pictures of brownies with numerical



symbols. Students will be working with halves, thirds, quarters, sixths, and eighths.

Equivalent Fractions: Level 2 – Using a Comparison Bar. In this activity, students will be given one fraction bar and asked to create a different but equivalent fraction bar. Students will be working with thirds, fourths, fifths, sixths, ninths, twelfths, and twentieths.

Equivalent Fractions: Level 3 – Four Fractions Bar. In this activity, students will be given one fraction bar and asked to create three different but equivalent fraction bars. Students will be given fraction bars showing thirds, fourths, fifths, sixths, ninths, twelfths, and twentieths.

Equivalent Fractions: Level 4 – Fraction Symbols and Fraction Bars. In this activity, students will be given a fraction symbol and asked to make a fraction bar that is different from but equivalent to symbols showing thirds, fourths, fifths, sixths, eighths, tenths, and twelfths.

Equivalent Fractions: Level 5 – Lowest Common Denominator. In this activity, students will create a fraction bar that represents the object pictured on the page. They will then create an equivalent fraction with the lowest common denominator.

Number Line Fractions: Level 1- Measuring to the Nearest Fourth. In this activity, students will be using a number line divided into fourths. They will be given a series of objects and asked to measure each object along the number line, giving their answer to the nearest fourth.

Number Line Fractions: Level 2- Measuring to the Nearest Tenth. In this activity, students will be using a number line divided into tenths. They will be given a series of objects and asked to measure each object along the number line, giving their answer to the nearest tenth.

Number Line Fractions: Level 3 - Comparing Tenths and Fourths. In this activity, students will use two number lines, one divided into fourths and one divided into tenths. They are asked to measure each object along both number lines, decide which number line gives a more accurate measurement, and record that answer.

Number Line Fractions: Level 4 – Addition and Subtraction. In this activity, students will use a number line to help them visualize and understand addition and subtraction of fractions.



Number Line Fractions: Level 5 – Reading Number Lines. In this activity, students will determine into how many fractional parts a number line has been divided. Then they will report the location of an animal on that number line as a fraction.

Comparing Fractions: Level 1 – Using Shapes. In this activity, students will be comparing fractions to decide if one fraction is greater than ( $>$ ), less than ( $<$ ), or equal to ( $=$ ) a second fraction. Each fraction is expressed as a numerical symbol and as a picture (a circle divided into sections).

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Comparing Fractions: Level 3 – Create Fraction Bars. In this activity, students will be deciding if one fraction is greater than, less than, or equal to a second fraction. They will create fraction bars and use comparison bars to show their thinking and verify their answers.

Comparing Fractions: Level 4 – Words and Symbols. In this activity, students will be deciding if one fraction is greater than, less than, or equal to a second fraction. They will create fraction bars and use comparison bars to show their thinking and verify their answers.

Comparing Fractions: Level 5 – Word Problems. In this activity, students will read a series of word problems. The fractions in the word problems include both parts of a whole and parts of a set. They will be deciding if one fraction is greater than, less than, or equal to a second fraction. They will use on-screen manipulatives to show their thinking and verify their answers.

Sorting Fractions: Level 1 – Smallest to Largest Fraction Pictures. In this activity, students will be asked to sort pictures of food that has been divided into fractions. They will move the pan or dish with the smallest fraction to the left and the pan or dish with the largest fraction to the right, matching each to fraction symbols on the page.

Sorting Fractions: Level 2 – Fraction Bars. In this activity, students will be asked to sort fraction bars from the smallest on the left to the



largest fraction bar on the right. Problems include fractions with different denominators (from halves to fifths).

Sorting Fractions: Level 3 – Different Denominators. In this activity, students will be asked to sort fraction bars from the smallest on the left to the largest fraction bar on the right. Problems include fractions with different denominators (from halves to twenty-fifths).

Sorting Fractions: Level 4 – Fraction Symbols. In this activity, students will be asked to sort fraction symbols, from the smallest on the left to the largest fraction symbol on the right. Fractions will usually have different denominators (from halves to twelfths).

Sorting Fractions: Level 5 – Pictures and Fraction Bars. In this activity, students will be asked to sort fraction pictures, from the smallest on the left to the largest fraction pictures on the right. Fractions will usually have different denominators (from thirds to twelfths). Students are encouraged to create fraction bars to check their work.

### **Compute fluently and make reasonable estimates**

- use visual models, benchmarks, and equivalent forms to add and subtract commonly used fractions and decimals

Number Line Fractions: Level 4 – Addition and Subtraction. In this activity, students will use a number line to help them visualize and understand addition and subtraction of fractions.

## **Measurement Standard**

### **Understand measurable attributes of objects and the units, systems, and processes of measurement**

- understand such attributes as length, area, weight, volume, and size of angle and select the appropriate type of unit for measuring each attribute

Number Line Fractions: Level 1- Measuring to the Nearest Fourth. In this activity, students will be using a number line divided into fourths. They will be given a series of objects and asked to measure each object along the number line, giving their answer to the nearest fourth.



Number Line Fractions: Level 2- Measuring to the Nearest Tenth. In this activity, students will be using a number line divided into tenths. They will be given a series of objects and asked to measure each object along the number line, giving their answer to the nearest tenth.

Number Line Fractions: Level 3 - Comparing Tenths and Fourths. In this activity, students will use two number lines, one divided into fourths and one divided into tenths. They are asked to measure each object along both number lines, decide which number line gives a more accurate measurement, and record that answer.

Number Line Fractions: Level 4 – Addition and Subtraction. In this activity, students will use a number line to help them visualize and understand addition and subtraction of fractions.

Number Line Fractions: Level 5 – Reading Number Lines. In this activity, students will determine into how many fractional parts a number line has been divided. Then they will report the location of an animal on that number line as a fraction.

- understand that measurements are approximations and how differences in units affect precision

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### **Apply appropriate techniques, tools, and formulas to determine measurements**

- select and apply appropriate standard units and tools to measure length, area, volume, weight, time, temperature, and the size of angles

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## **Problem Solving Standard**



Build new mathematical knowledge through problem solving

Number Line Fractions: Level 4 – Addition and Subtraction. In this activity, students will use a number line to help them visualize and understand addition and subtraction of fractions.

Solve problems that arise in mathematics and in other contexts

Number Line Fractions: Level 4 – Addition and Subtraction. In this activity, students will use a number line to help them visualize and understand addition and subtraction of fractions.

## **Representation Standard**

Create and use representations to organize, record, and communicate mathematical ideas

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Number Line Fractions: Level 3 - Comparing Tenths and Fourths. In this activity, students will use two number lines, one divided into fourths and one divided into tenths. They are asked to measure each object along both number lines, decide which number line gives a more accurate measurement, and record that answer.



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Sorting Fractions: Level 3 – Different Denominators. In this activity, students will be asked to sort fraction bars from the smallest on the left to the largest fraction bar on the right. Problems include fractions with different denominators (from halves to twenty-fifths).

Sorting Fractions: Level 4 – Fraction Symbols. In this activity, students will be asked to sort fraction symbols, from the smallest on the left to the largest fraction symbol on the right. Fractions will usually have different denominators (from halves to twelfths).

Sorting Fractions: Level 5 – Pictures and Fraction Bars. In this activity, students will be asked to sort fraction pictures, from the smallest on the left to the largest fraction pictures on the right. Fractions will usually have different denominators (from thirds to twelfths). Students are encouraged to create fraction bars to check their work.

Select, apply, and translate among mathematical representations to solve problems

Number Line Fractions: Level 4 – Addition and Subtraction. In this activity, students will use a number line to help them visualize and understand addition and subtraction of fractions.