

Fractions

Unit 9 Overview: 8 lessons

Students learn what a fraction is as a number. A unit fraction is one of the equal parts of a whole, and $\frac{a}{b}$ is a of those parts, written in numbers and in words. They cut shapes into parts with the same area and see that equal parts can look different, then put fractions on a number line, where the space from 0 to 1 is the whole. In some states the unit also takes in fractions of a set and sharing, fractions greater than 1 as mixed numbers, and a fraction as a sum of unit fractions. Paper strips folded into equal parts are the model to come back to every day.

THE UNIT, DAY BY DAY

Day 1	Pre-Check	What students already know, before the first lesson.
Day 2	9.1 Unit fractions	I can name one of the equal parts as a unit fraction.
Day 3	9.2 Numerator and denominator	I can read and write fractions in numbers and words.
Day 4	9.3 Parts with the same area	I can cut a shape into parts with the same area.
Day 5	9.4 Fractions of a set and sharing ★	I can find a fraction of a set and share things equally.
Day 6	9.5 Unit fractions on a number line	I can show a unit fraction on a number line.
Day 7	9.6 Fractions on a number line	I can name and place fractions on a number line.
Day 8	9.7 Fractions greater than 1 ★	I can write a fraction greater than 1 as a mixed number.
Day 9	9.8 Fractions as sums of unit fractions ★	I can write a fraction as a sum of unit fractions.
Day 10	Unit Review	The review, to go over together.
Day 11	Unit Test	Form A; Form B (other numbers) is for a retest.

★ Taught in 3rd grade in some states. Skip these lessons if yours teaches them in another grade; animalmath.com/standards shows your state's list.

GET READY FOR THE UNIT

- Paper strips all the same length for every student, to fold into halves, fourths and eighths (and thirds and sixths)
- Pattern blocks for each pair: hexagons, trapezoids, rhombuses and triangles
- Grid paper, scissors and crayons
- Number lines from 0 to 1 and from 0 to 2, on the board and on paper strips
- Two-color counters for fractions of a set

HOW EACH LESSON GOES

- 1. Warm up** (5 min)
- 2. Teach** (10 min)
- 3. Try it together** (10 min)
- 4. Practice** (15 min)
- 5. Exit ticket** (5 min): a quick check on the lesson.

Each lesson page ends with the Animal Math sheets, makers, tools and quizzes for it. “Sheet 3” is the third worksheet of a pack; a color pack prints each sheet again in black and white.

CHECKING AS YOU GO

PRINTABLE	Pre-Check: Day 1, with a key	EXIT TICKET	Exit Tickets: one a lesson, four to a page
PRINTABLE	Unit Review: the day before the test	PRINTABLE	Unit Test: Forms A and B, with keys



Fractions

Lesson 9.1: Unit fractions

GOAL Students learn that a unit fraction names one of the equal parts of a whole: cut into b equal parts, one part is $1/b$. The parts must be equal, and more parts means smaller parts.

About 45 minutes

I can name one of the equal parts as a unit fraction.

THE LESSON

- 1 Warm up** (5 min) Draw a rectangle cut into 2 equal parts and one cut into 2 parts that are not equal. Thumbs up or down: which one shows halves? Why?
- 2 Teach** (10 min) Fold a strip in half, then in half again: 4 equal parts. Shade one and write $1/4$: one part of 4 equal parts. Cover a hexagon with 6 triangles: one triangle is $1/6$ of it. Cover it with 3 rhombuses: one rhombus is $1/3$. Hold a triangle against a rhombus: more parts means smaller parts.
Say: "When a whole is cut into equal parts, one part is a unit fraction. The bottom number tells how many parts make the whole."
- 3 Try it together** (10 min) Pairs fold strips into halves, fourths and eighths, label one part of each, then order the three unit fractions from the biggest part to the smallest.
- 4 Practice** (15 min) Students sort equal and not equal parts and name one part on sheet 1 of Understanding Fractions. Early finishers make a Basic Fractions page.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 9.1** and circle a face beside the "I can" line. Question 1: the grid and the circle cut into 8 equal parts; circling the uneven circle means the parts were not checked. Question 2: $1/3$ and $1/4$; $1/2$ means shaded was compared with not shaded.

Need help? Cover a hexagon with pattern blocks, count the pieces, then name one piece.

Ready for more? Fold a strip into sixths, or show $1/2$ of a hexagon two ways.

GET READY

- Paper strips all the same length, four for each student
- Pattern blocks: hexagons, rhombuses and triangles

WORDS TO USE

equal parts: parts that are all the same size

whole: all the parts together

unit fraction: one of the equal parts, like $1/4$, with a 1 on top

ASK

- How do you know the parts are equal?
- One part is $1/8$. How many parts make the whole?
- Which is bigger, $1/3$ or $1/6$ of a hexagon? Why?

WATCH FOR

Names a part when the parts are not equal.

Layer the parts on each other to check first.

Writes shaded over not shaded ($1/7$ for 1 of 8).

Count every part, shaded or not, for the bottom number.

Thinks $1/8$ is bigger than $1/4$ because 8 is

bigger. Lay the eighths strip under the fourths strip.

ON ANIMAL MATH

PRINTABLE

Understanding Fractions: sheet 1

MAKER

Basic Fractions: Denominator Range Grade 3 Denominators, Problem Type Identify the Fraction

TOOL

Pattern Blocks: cover a hexagon with triangles or rhombuses

QUIZ

Fractions Quiz: the Unit Fractions level

EXIT TICKET

3rd Grade Fractions Exit Tickets: Exit Ticket 9.1

Fractions

Lesson 9.2: Numerator and denominator

GOAL Students read and write fractions a/b : the denominator tells how many equal parts make the whole, the numerator how many of them we mean. They write fractions in numbers and in words, and shade a fraction of a shape.

About 45 minutes

I can read and write fractions in numbers and words.

THE LESSON

- 1 Warm up** (5 min) Show a strip in 4 equal parts with one shaded. Students write $1/4$ on whiteboards. Shade one more: how many fourths now?
- 2 Teach** (10 min) Write $2/4$ under the strip. The 4: the strip is cut into 4 equal parts. The 2: we shaded 2 of them. Say it: two fourths. Shade 2 of 3 equal parts of a circle and have students write and say it: $2/3$, two thirds. Then read three sixths aloud and shade it on a strip in sixths.
Say: "The denominator tells how many equal parts make the whole. The numerator tells how many of them we are talking about."
- 3 Try it together** (10 min) Pairs trade fraction cards: one reads a card, the other writes it in numbers and shades it on a cut shape. Use four eighths, one sixth and three thirds.
- 4 Practice** (15 min) Students write shaded fractions, their numerators, denominators and names on sheet 2 of Understanding Fractions, then shade fractions given both ways on sheet 3. Early finishers make a Basic Fractions page.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 9.2** and circle a face beside the "I can" line. Question 1: $4/6$ and four sixths; $6/4$ has the numbers swapped. Question 2: 5 of 8 parts and 3 of 4 parts shaded; shading 4 for three fourths means the bottom number was used.

Need help? Color the parts one at a time, saying one sixth, two sixths, three sixths.

Ready for more? Write a fraction for the part not shaded too, or shade one fraction on two shapes.

GET READY

- Strips, rectangles and circles cut into equal parts, and crayons
- Fraction cards, some in numbers and some in words
- Whiteboards and markers

WORDS TO USE

numerator: the top number, how many parts we mean

denominator: the bottom number, how many equal parts make the whole

fraction bar: the line between the two numbers

ASK

- What does the 6 in $5/6$ tell you? The 5?
- How do you write two thirds in numbers?
- How many eighths make the whole strip?

WATCH FOR

Writes the numbers upside down ($3/2$ for two thirds). Say it: two (how many) thirds (the kind of part). The kind goes on the bottom.

Counts only the parts not shaded for the bottom number. Touch and count every part.

Writes the words like whole numbers (four six). Keep a word wall: halves, thirds, fourths, sixths, eighths.

ON ANIMAL MATH

PRINTABLE

Understanding Fractions: sheets 2-3

MAKER

Basic Fractions: Denominator Range Grade 3 Denominators, Problem Type Mixed

QUIZ

Fractions Quiz: the Name the Fraction level

EXIT TICKET

3rd Grade Fractions Exit Tickets: Exit Ticket 9.2

Fractions

Lesson 9.3: Parts with the same area

GOAL Students cut shapes into parts with the same area and see that equal parts can look different, as long as each has the same number of squares. Each part is a unit fraction of the whole.

About 45 minutes

I can cut a shape into parts with the same area.

THE LESSON

- 1 Warm up** (5 min) Draw a 6 by 2 rectangle cut into thirds two ways: three 2 by 2 squares, and one 2 by 2 square with two L shapes beside it. Are both thirds? Count the squares in one part of each.
- 2 Teach** (10 min) Cut a 3 by 4 rectangle into 3 strips of 4 squares: each is $\frac{1}{3}$. Cut another into a strip along the top and two L shapes under it, each of 4 squares: they look different, but each is still $\frac{1}{3}$. Then cut one into parts of 5, 4 and 3 squares: not thirds, because the areas are not equal.
Say: "Equal parts have the same area. They do not have to be the same shape."
- 3 Try it together** (10 min) Pairs find two ways to cut a 3 by 6 rectangle into thirds and two ways into sixths, count the squares in each part and write the unit fraction on it.
- 4 Practice** (15 min) Students count squares and cross out shapes with parts that are not equal on sheet 4 of Understanding Fractions, then find equal shares that look different on sheet 4 of Halves, Thirds and Fourths. Early finishers make an Equal or Not Equal Shares page.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 9.3** and circle a face beside the "I can" line. Question 1: the first two squares (every part has 3 squares); circling only the strips means equal parts were thought to look alike. Question 2: 4 parts of 2 squares each, one shaded, and $\frac{1}{4}$.

Need help? Build each part with paper squares, the same number in every part.

Ready for more? Find three ways to cut a 4 by 4 square into halves.

GET READY

- Grid paper rectangles, 3 by 4 and 3 by 6 squares, and paper squares
- Scissors and colored pencils

WORDS TO USE

area: how many squares cover a shape

same area: covered by the same number of squares

equal parts: parts with the same area, even if they look different

ASK

- How many squares are in each part?
- These parts look different. Are they still thirds? How do you know?
- What fraction of the whole is one part?

WATCH FOR

Says parts are not equal because the shapes differ. Count the squares in each part and write the count on it.

Cuts the right number of parts, but of different sizes. Share the squares first: 12 squares in 3 parts is 4 a part.

Names a part by its squares (4 squares, so $\frac{1}{4}$). Ask how many parts make the whole.

ON ANIMAL MATH

PRINTABLE

Understanding Fractions: sheet 4

PRINTABLE

Halves, Thirds and Fourths: sheet 4

MAKER

Basic Fractions: Problem Type Equal or Not Equal Shares, Denominator Range Grade 3 Denominators, Shape Type Squares, for early finishers

QUIZ

Fractions Quiz: the Unit Fractions level

EXIT TICKET

3rd Grade Fractions Exit Tickets: Exit Ticket 9.3

Fractions

Lesson 9.4: Fractions of a set and sharing

GOAL Students name a fraction of a set (3 of 4 counters are red: $\frac{3}{4}$ of the set is red) and share things equally: each thing is cut into one part for each friend.

I can find a fraction of a set and share things equally.

About 45 minutes
★ Taught in 3rd grade in some states

THE LESSON

- 1 Warm up** (5 min) Put 4 counters in a cup, 3 red and 1 yellow. How many make the whole set? How many are red? Write $\frac{3}{4}$: three fourths are red.
- 2 Teach** (10 min) In a set, all the things are the bottom number and the ones we mean the top. Show 6 counters, 5 red: $\frac{5}{6}$ red, $\frac{1}{6}$ yellow. Then share: 6 friends share 5 crackers. Cut every cracker into 6 parts and give each friend one part of each. Each friend gets 5 parts, $\frac{5}{6}$ of a cracker.
Say: "For a set, the bottom number is how many things in all. To share, I cut each thing into a part for each friend."
- 3 Try it together** (10 min) Pairs build sets and write a fraction for each color: 8 counters with 7 red, then 6 with 3 red. Then they act out 6 friends sharing 4 paper bars.
- 4 Practice** (15 min) Students write fractions of sets and solve sharing stories on sheet 5 of Understanding Fractions, then do the sets at the bottom of sheet 2 of Unit Fractions to Eighths.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 9.4** and circle a face beside the "I can" line. Question 1: $\frac{5}{8}$; $\frac{5}{3}$ means gray over white. Question 2: $\frac{2}{3}$ of a bar; $\frac{1}{3}$ means each friend got a part of only one bar.

Need help? Touch and count real counters; cut paper bars and hand the parts to paper friends.

Ready for more? Show that the fractions for both colors make the whole: $\frac{1}{6}$ and $\frac{5}{6}$ make $\frac{6}{6}$.

GET READY

- Two-color counters and a cup for each pair
- Paper bars and crackers to cut, and scissors

WORDS TO USE

set: a group of things that is one whole

fraction of a set: how many of the things, out of all of them

share equally: give everyone the same amount

ASK

- How many things make the whole set?
- Each friend gets a part of every bar. How many parts is that?
- What fraction of the counters are not red?

WATCH FOR

Writes red over yellow ($\frac{3}{1}$). Count all the counters first: that is the bottom number.

Hands out whole bars until they run out. Equally means the same for everyone: cut every bar into a part for each friend.

Gives the parts of one bar as the answer. Ask how many bars there are, and give a part of each.

ON ANIMAL MATH

PRINTABLE

Understanding Fractions: sheet 5

PRINTABLE

Unit Fractions to Eighths: sheet 2, the sets

QUIZ

Fractions Quiz: the Fractions of a Set level

EXIT TICKET

3rd Grade Fractions Exit Tickets: Exit Ticket 9.4

Fractions

Lesson 9.5: Unit fractions on a number line

GOAL Students see the space from 0 to 1 on a number line as one whole. Cut into b equal parts, each part is $1/b$, so the first mark after 0 is $1/b$.

About 45 minutes

I can show a unit fraction on a number line.

THE LESSON

- 1 Warm up** (5 min) Draw a line from 0 to 2 with a mark at 1. How far is it from 0 to 1? That length is one whole.
- 2 Teach** (10 min) Fold a strip from 0 to 1 in half and mark the fold: 2 equal parts, so the mark is $1/2$. Then show a line from 0 to 1 already cut into 4 equal parts. The first mark after 0 ends one part, so it is $1/4$, not 1. Lay a strip one part long from 0 to check.
Say: "I count the parts, not the marks. The first mark after 0 ends one part, so it is the unit fraction."
- 3 Try it together** (10 min) Pairs get lines from 0 to 2 marked in halves and in fourths, so the marks go on past 1. They count the parts from 0 to 1, label the first mark after 0 on each line, and check it with a strip one part long.
- 4 Practice** (15 min) Students count the parts, label the first mark and draw marks under fraction strips on sheet 1 of Fractions on a Number Line, then label every mark on sheet 2.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 9.5** and circle a face beside the "I can" line. Question 1: $1/3$; $1/2$ means the 2 marks were counted, not the 3 parts. Question 2: 7 marks between 0 and 1, about evenly spaced, and $1/8$ at the first; 8 marks between means the marks were counted, not the parts.

Need help? Fold strips as long as 0 to 1 and lay them on the line before marking.

Ready for more? On a line from 0 to 2 marked only at 0, 1 and 2, find and mark $1/2$ and $1/4$.

GET READY

- Paper strips as long as 0 to 1 on the number line, to fold
- Number lines from 0 to 1 and 0 to 2 with no marks between
- A line from 0 to 1 cut into fourths, and lines from 0 to 2 in halves and in fourths

WORDS TO USE

number line: a line where every point is a number

equal parts: spaces between marks that are all the same length

mark: a short line across the number line

ASK

- How many equal parts are between 0 and 1?
- Is the first mark the end of a part or the start of one?
- On a line from 0 to 2, where is $1/2$? Why is it not at 1?

WATCH FOR

Counts the marks instead of the parts. Put a finger on 0 and count the hops.

Labels the first mark 1. Lay a strip one part long from 0: it ends at the first mark.

Draws marks that are not evenly spaced. Fold a strip as long as 0 to 1 and mark the folds.

ON ANIMAL MATH

PRINTABLE

Fractions on a Number Line: sheets 1-2

QUIZ

Fractions Quiz: the Number Lines level

EXIT TICKET

3rd Grade Fractions Exit Tickets: Exit Ticket 9.5

Fractions

Lesson 9.6: Fractions on a number line

GOAL Students name and place fractions a/b on a number line: a/b is a jumps of $1/b$ from 0. They label every mark from 0 to 1 and see that b/b is at 1.

About 45 minutes

I can name and place fractions on a number line.

THE LESSON

- 1 Warm up** (5 min) Show a line from 0 to 2 in thirds. Count the jumps aloud from 0: one third, two thirds, up to six thirds. Where is $3/3$? At 1.
- 2 Teach** (10 min) On a line from 0 to 1 in sixths, hop from 0 and label each mark as you land: $1/6$, $2/6$, $3/6$. Put a dot at $4/6$: 4 jumps of $1/6$. Then point to the mark at 1 and count the jumps from 0: 6 jumps, so label $6/6$ under 1.
Say: "The bottom number tells the size of each jump. The top number tells how many jumps from 0."
- 3 Try it together** (10 min) Pairs take turns on a line in eighths: one puts a sticky dot on a mark and the other names it; then one says a fraction and the other places the dot.
- 4 Practice** (15 min) Students name points and circle the fraction at the dot on sheet 3 of Fractions on a Number Line, then draw dots at fractions on sheet 4. Early finishers do the lines on sheet 2 of Benchmark Fractions.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 9.6** and circle a face beside the "I can" line. Question 1: $5/6$; $5/5$ means the 5 marks were counted as the parts. Question 2: a dot at the middle mark, labeled $2/4$; a dot at $1/4$ or $3/4$ means the jumps were not counted from 0.

Need help? Lay strips one part long along the line, one for each jump, and count them.

Ready for more? Place $5/4$ on a line from 0 to 2.

GET READY

- Number lines from 0 to 1 in fourths, sixths and eighths
- Paper strips one part long, for jumps
- Sticky dots

WORDS TO USE

jump: one part of the line, from one mark to the next

point: a dot on the line that shows a number

four fourths: all the parts, the same as 1

ASK

- How many jumps from 0 is the dot?
- What size is each jump?
- Where is $8/8$ on this line?

WATCH FOR

Counts the mark at 0 as the first jump. Start with a finger on 0 and say zero; the first hop lands on the first mark.

Uses the number of marks as the denominator. Count the spaces between 0 and 1, not the marks.

Counts back from 1 instead of from 0. Always start at 0, as on a ruler.

ON ANIMAL MATH

PRINTABLE

Fractions on a Number Line: sheets 3–4

PRINTABLE

Benchmark Fractions: sheet 2 for early finishers

QUIZ

Fractions Quiz: the Number Lines level

EXIT TICKET

3rd Grade Fractions Exit Tickets: Exit Ticket 9.6

Fractions

Lesson 9.7: Fractions greater than 1

GOAL Students see that a fraction can be more than 1: $\frac{6}{4}$ is 6 fourths, 1 whole and 2 fourths, written $1\frac{2}{4}$. They write the shaded part of two wholes both ways and place fractions past 1 on a number line.

About 45 minutes

★ Taught in 3rd grade in some states

I can write a fraction greater than 1 as a mixed number.

THE LESSON

- 1 Warm up** (5 min) Hand out paper fourths. Students put 4 fourths together into a whole circle and say: four fourths is one whole.
- 2 Teach** (10 min) Lay out 6 fourths: 4 make a circle and 2 are left. All together: 6 fourths, $\frac{6}{4}$. Wholes first: 1 whole and 2 fourths, $1\frac{2}{4}$. Then the other way: $2\frac{1}{2}$ is 2 wholes and 1 half, and each whole is 2 halves, so $2 + 2 + 1 = 5$ halves, $\frac{5}{2}$. Show $\frac{5}{2}$ on a line from 0 to 3 in halves.
Say: "When the top number is bigger than the bottom one, the fraction is more than 1. I take out the wholes and see what is left."
- 3 Try it together** (10 min) Pairs build $\frac{7}{3}$, $\frac{9}{4}$ and $\frac{11}{6}$ with paper pieces and write each one both ways, then find $\frac{7}{3}$ on a line from 0 to 3 in thirds.
- 4 Practice** (15 min) Students write the shaded part both ways on sheet 1 of Mixed Numbers and Improper Fractions, shade models on sheet 2 and name points on sheet 4. Early finishers do the lines past 1 on sheet 5 of Fractions on a Number Line.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 9.7** and circle a face beside the "I can" line. Question 1: $\frac{7}{4}$ and $1\frac{3}{4}$; $\frac{7}{8}$ means the two bars were taken as one whole. Question 2: $\frac{5}{3}$; $\frac{3}{3}$ means the whole and the parts were added as numbers.

Need help? Fill one paper whole first, then count what is left.

Ready for more? Write $\frac{13}{4}$ as a mixed number, or tell how many sixths are in $2\frac{1}{6}$.

GET READY

- Paper circles and strips cut into halves, thirds, fourths and sixths, several of each
- Number lines from 0 to 2 and 0 to 3

WORDS TO USE

fraction greater than 1: more parts than make one whole, like $\frac{7}{3}$

mixed number: a whole number and a fraction, like $1\frac{1}{2}$

whole: all the parts of one thing, like $\frac{2}{2}$

ASK

- How many fourths make one whole?
- Is $\frac{9}{4}$ more or less than 1? How do you know?
- How many thirds are in 2 wholes?

WATCH FOR

Counts the parts of both wholes as the denominator ($\frac{3}{4}$ for 3 halves). Each bar is one whole cut into 2, so each part is still a half.

Writes $1\frac{1}{2}$ as $\frac{2}{2}$ by adding the numbers.

Build it: 1 whole is 2 halves, and 1 half more is 3 halves.

Thinks a fraction can never be more than 1.

Lay out more pieces than make a whole and count them.

ON ANIMAL MATH

PRINTABLE

Mixed Numbers and Improper Fractions: sheets 1, 2 and 4

PRINTABLE

Fractions on a Number Line: sheet 5 for early finishers

QUIZ

Fractions Quiz: the Number Lines level

EXIT TICKET

3rd Grade Fractions Exit Tickets: Exit Ticket 9.7

Fractions

Lesson 9.8: Fractions as sums of unit fractions

GOAL Students break a fraction into unit fractions ($2/3 = 1/3 + 1/3$) and put unit fractions together: add the numerators and keep the denominator, because the parts stay the same size.

About 45 minutes

★ Taught in 3rd grade in some states

I can write a fraction as a sum of unit fractions.

THE LESSON

- 1 Warm up** (5 min) Show a strip in eighths. Count the parts aloud as unit fractions: one eighth, two eighths, up to eight eighths.
- 2 Teach** (10 min) Shade 5 parts of a strip in sixths. Each part is $1/6$, so $5/6 = 1/6 + 1/6 + 1/6 + 1/6 + 1/6$. Write it under the strip. Then the other way: $1/4 + 1/4$. Shade one fourth, then another: $2/4$. The parts are still fourths; only the count changes.
Say: "A fraction is made of unit fractions. When I add them, I count the parts; the size of the parts does not change."
- 3 Try it together** (10 min) Pairs shade $2/3$, $7/8$ and $4/4$ on strips and write each as a sum of unit fractions. Then one writes a sum of unit fractions and the other writes it as one fraction.
- 4 Practice** (15 min) Students write sums of unit fractions on sheet 1 of Decomposing Fractions, break fractions apart two ways on sheet 2 and put parts together on sheet 3 (skip the fifths and tenths if your class has not met them). Early finishers add unit fractions past 1 on sheet 3 of Mixed Numbers and Improper Fractions.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 9.8** and circle a face beside the "I can" line. Question 1: $1/4 + 1/4 + 1/4$; $1/4 + 2/4$ is true but not a sum of unit fractions. Question 2: $3/8$; $3/24$ means the denominators were added too.

Need help? Cut the shaded parts off a strip and lay them in a row, naming each one.

Ready for more? Write $5/6$ as a sum in three different ways, or write $7/4$ as unit fractions.

GET READY

- Paper strips cut into thirds, fourths, sixths and eighths
- Crayons in two colors
- Whiteboards

WORDS TO USE

unit fraction: one equal part, a fraction with 1 on top

sum: what you get when you add

break apart: write a number as parts that add up to it

ASK

- How many unit fractions make $5/6$?
- Why does the denominator stay the same when you add?
- Can you write $4/8$ another way, with two parts?

WATCH FOR

Adds the denominators ($1/4 + 1/4 = 2/8$). Shade both on one strip: they are still fourths, and there are 2.

Writes too many or too few unit fractions. Write one unit fraction for each shaded part.

Mixes sizes ($2/3 = 1/2 + 1/3$). Every part must be the size of the parts of the whole.

ON ANIMAL MATH

PRINTABLE

Decomposing Fractions: sheets 1-3

PRINTABLE

Mixed Numbers and Improper Fractions: sheet 3 for early finishers

EXIT TICKET

3rd Grade Fractions Exit Tickets: Exit Ticket 9.8