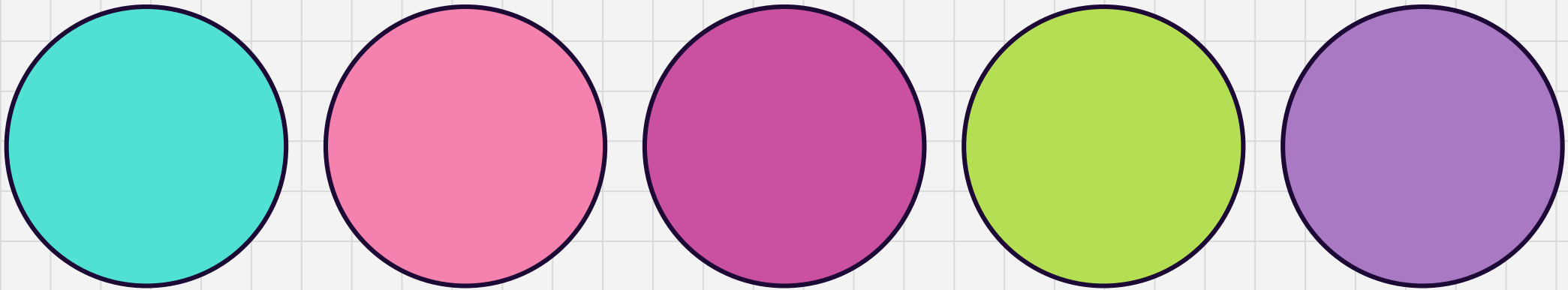




# Unit 4, Module 3, Session 2

## Comparing & Ordering Unit Fractions





# Learning Goal:

I can compare and order unit fractions from greatest to least.

I can understand that piece size gets smaller as the number of pieces increases.

# Problems & Investigations

If you like cookies, would you rather be in a group of 2 people sharing one cookie or 3 people sharing one cookie? Why?

Would you rather be in a group of 2 people sharing 1 cookie or 6 people sharing two cookies? Why?

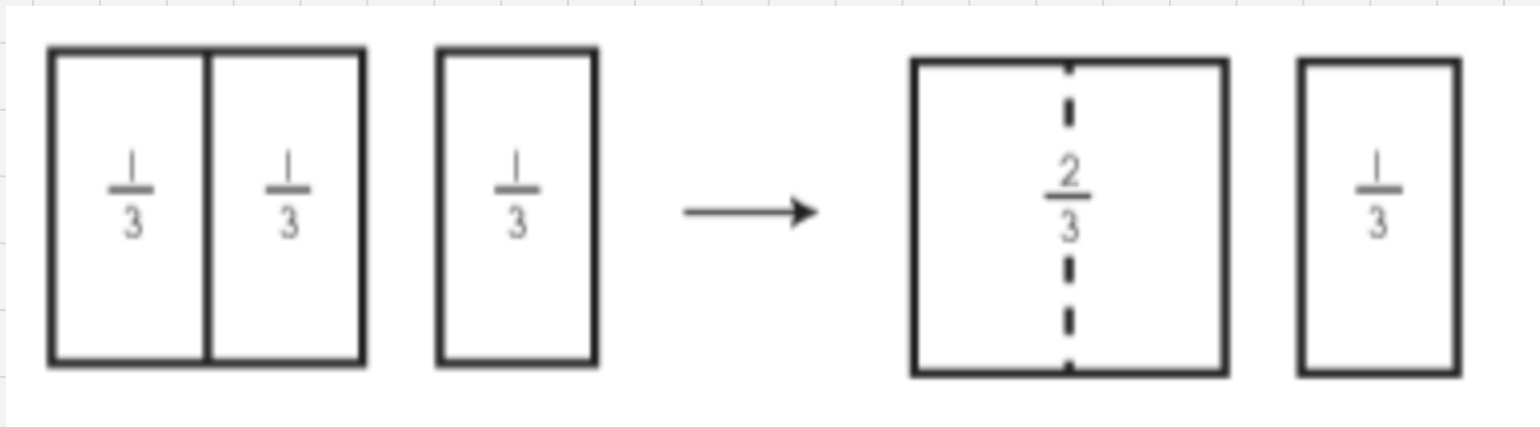
Would you rather be in a group of 50 people sharing or 25 people sharing? Why?



Get out your envelop of rectangles from yesterday, and find the one you folded into thirds.

Cut one of the  $\frac{1}{3}$  pieces off of the rectangle.

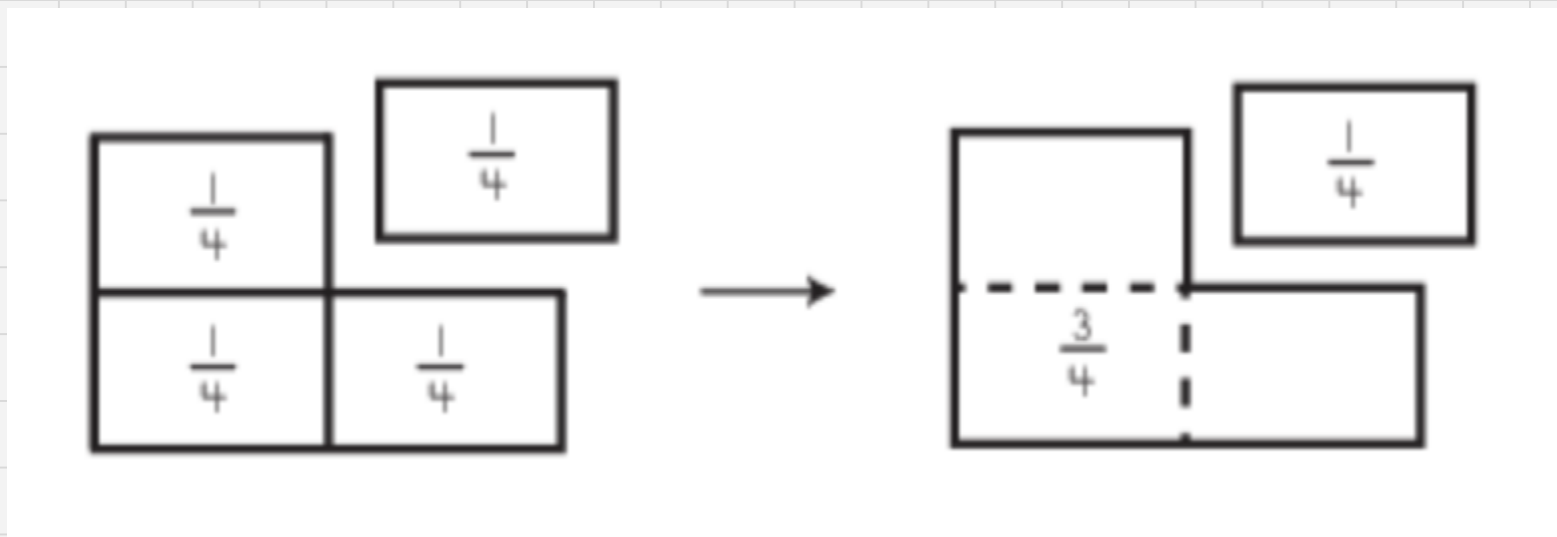
Flip the larger piece that has two  $\frac{1}{3}$  pieces labeled over and label it  $\frac{2}{3}$



Find the one you folded into fourths.

Cut one of the  $\frac{1}{4}$  pieces off of the rectangle.

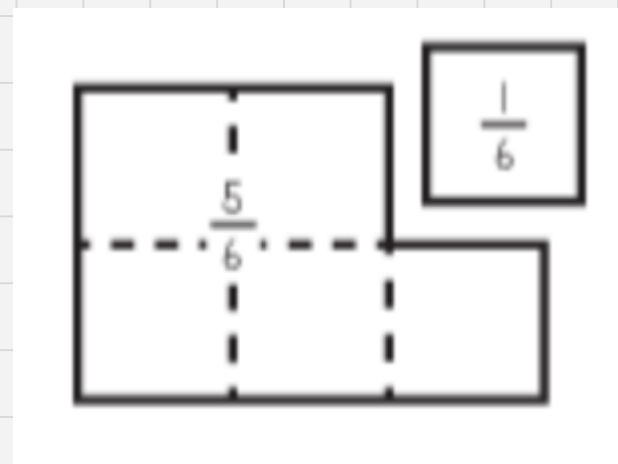
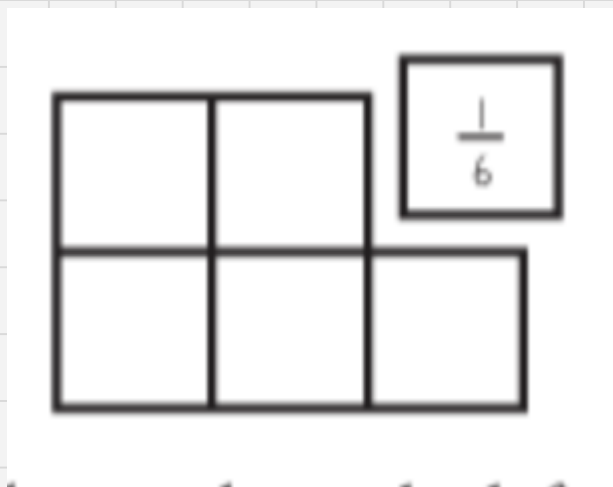
Flip the larger piece that has three  $\frac{1}{4}$  pieces labeled over and label it  $\frac{3}{4}$ .



Find the one you folded into sixths.

Cut one of the  $\frac{1}{6}$  pieces off of the rectangle.

What should we label the larger part of this shape?





Find the one you folded into eighths.

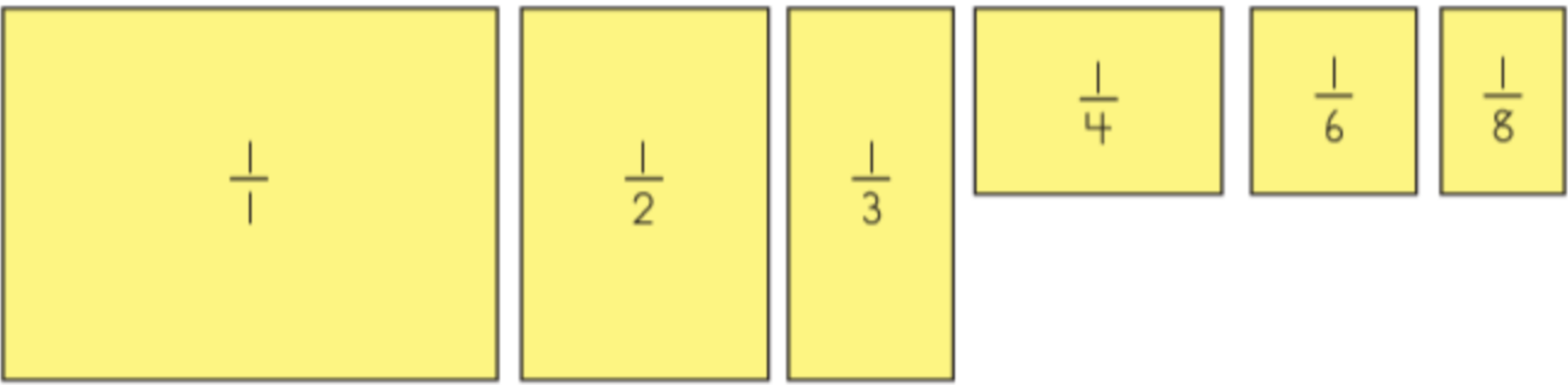
Cut one of the  $\frac{1}{8}$  pieces off of the rectangle.

What should we label the larger part of this shape?





Let's line up each of our Unit Fractions:



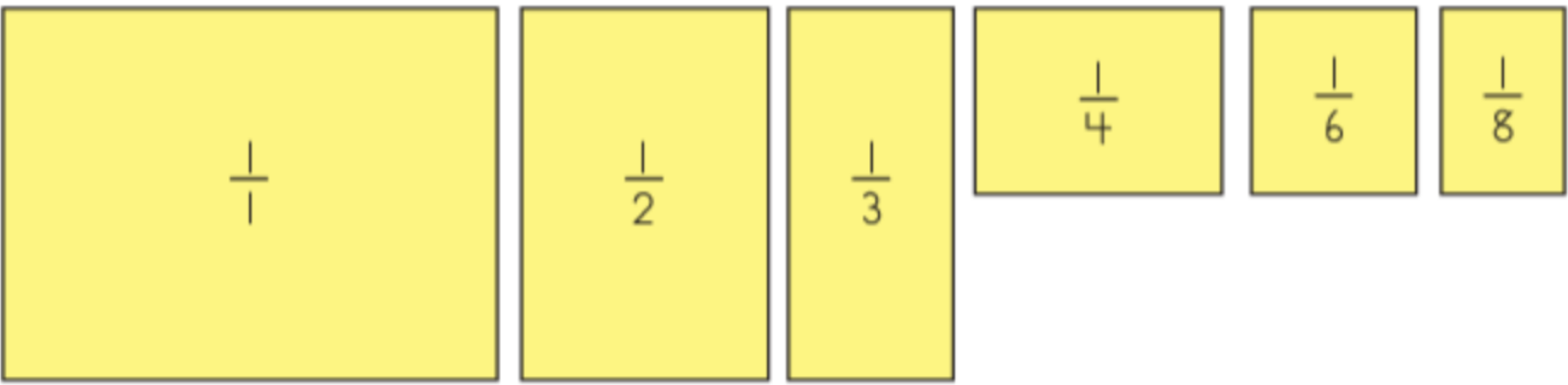
If 4 is greater than 2, why is  $\frac{1}{2}$  greater than  $\frac{1}{4}$ ?







Let's line up each of our Unit Fractions:

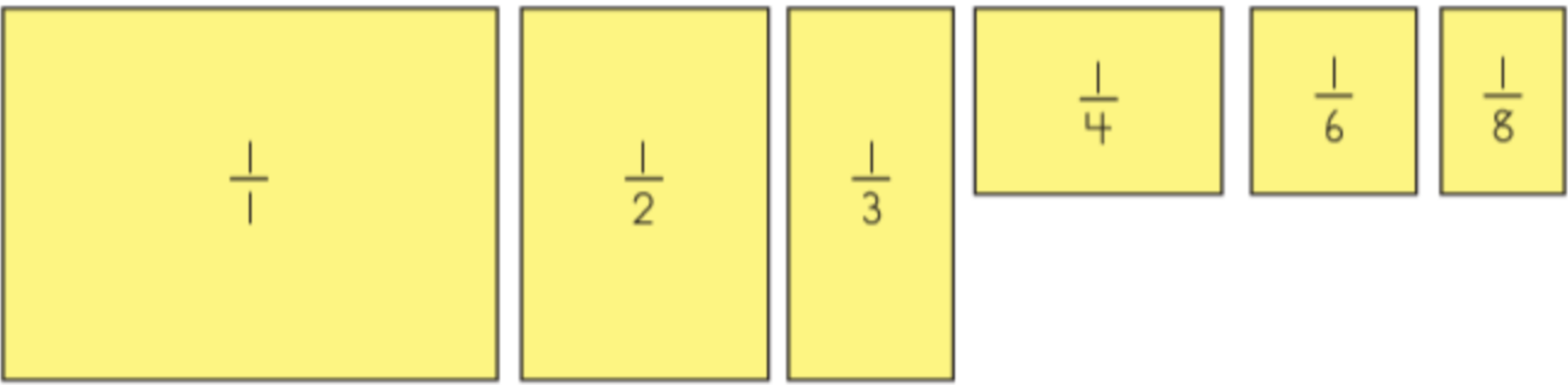


Why is  $\frac{1}{8}$  less than  $\frac{1}{4}$  when 8 is twice as big as 4?





Let's line up each of our Unit Fractions:

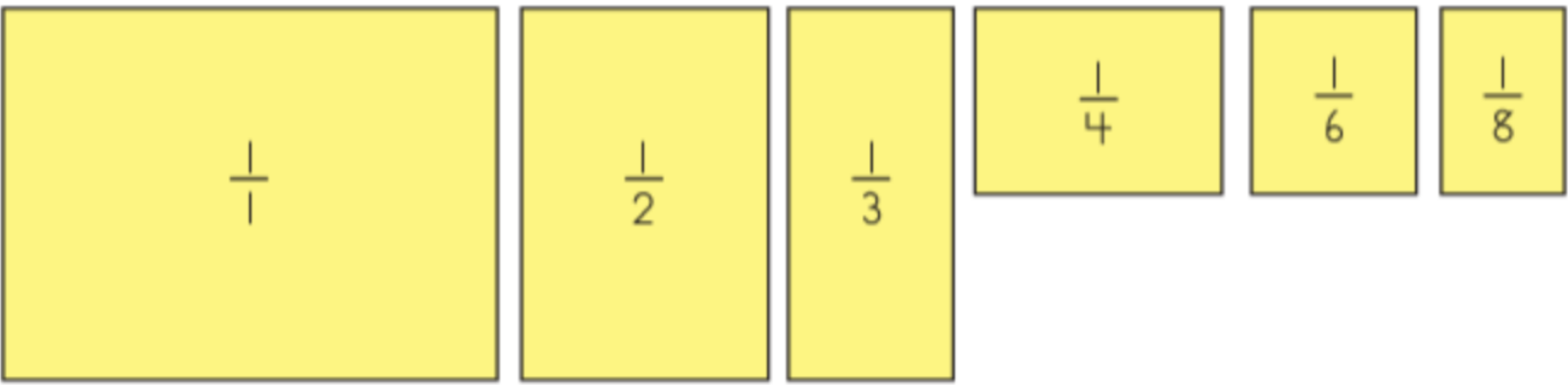


What happens when you share one cookie with more and more people?  
Why?





Let's line up each of our Unit Fractions:

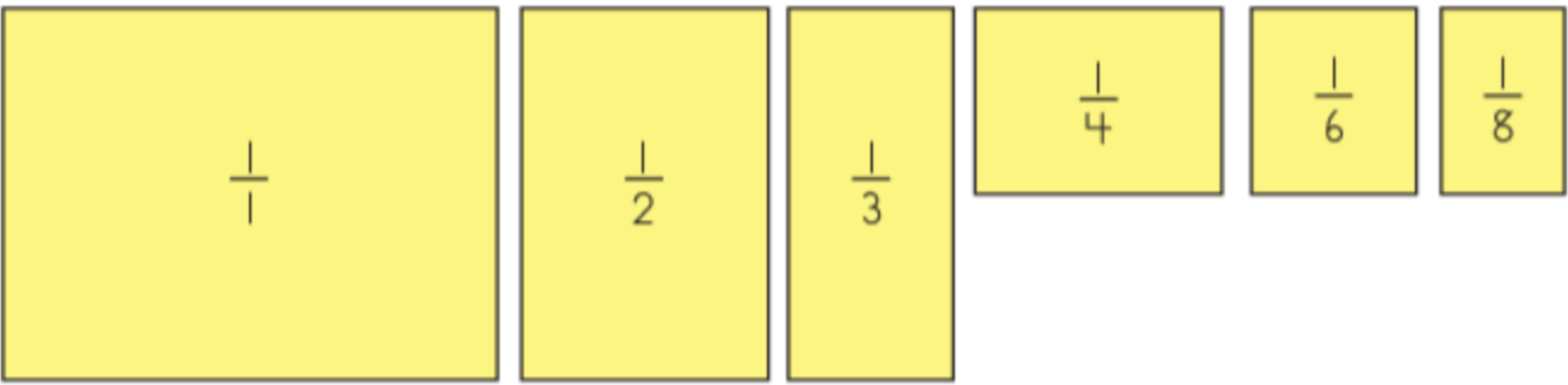


What does the denominator (number on the bottom of each fraction) mean in the context of fair shares?





Let's line up each of our Unit Fractions:



What happens as the denominator gets larger? Why?





Now let's take a look at these strips of red paper. Let's pretend these red pieces are imaginary licorice whips. We are going to work together to fold, cut, label, and order a set of unit fractions.

What do you think will happen as we use these long strips, will  $\frac{1}{2}$  still be more than  $\frac{1}{4}$ ?

Will  $\frac{1}{8}$  of one of the strips be smaller than  $\frac{1}{4}$  of another?





If one person would get this one, and doesn't have to share it, what would we label it?

$1/1=1$

If two people are sharing this one, how much is each person's share?

$1/2$

If three people are sharing this one, how much is each person's share?

$1/3$

If four people are sharing this one, how much is each person's share?

$1/4$

If six people are sharing this one, how much is each person's share?

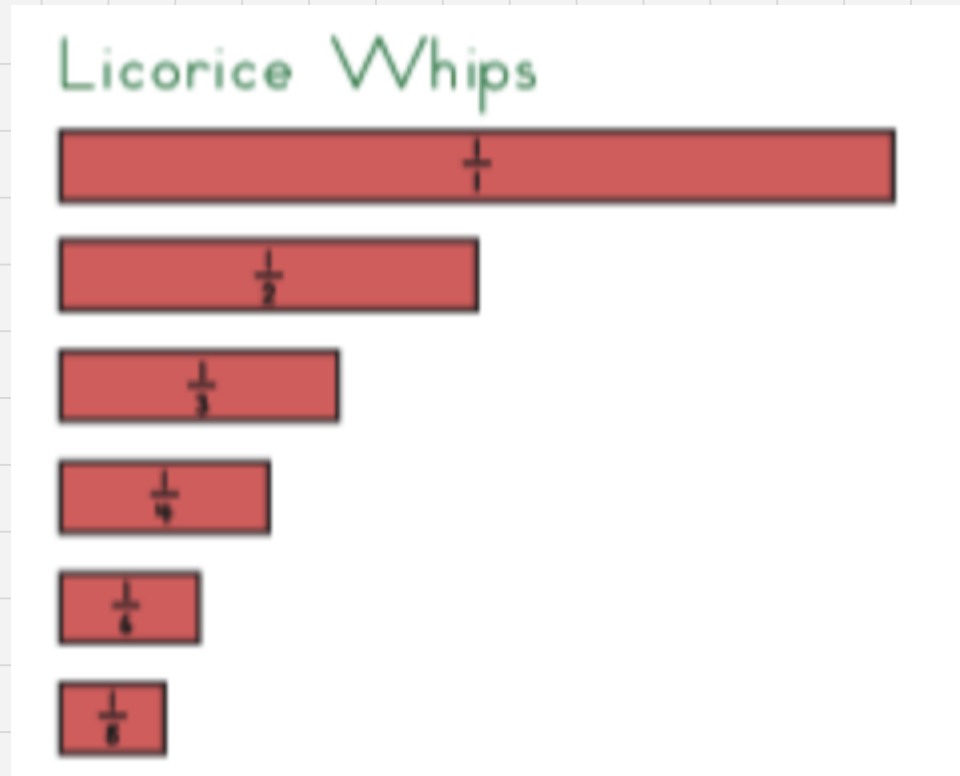
$1/6$

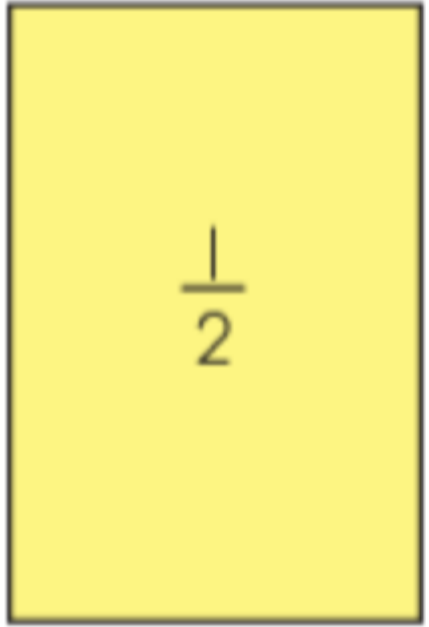
If eight people are sharing this one, how much is each person's share?

$1/8$



Let's put our red pieces in order from greatest to least.





Are these both one-half? How can that be?

Which half would you rather have? Why?

Which half is bigger? How do you know?

Does the size of the whole matter? Why?





# Daily Practice

## Must Do

- Student Book Page 129
- XtraMath

## May Do

- 3B Add & Round Tens
- 3C Round Ball Hundreds
- 3D Round & Add Hundreds
- 4A Tic-Tac-Tock
- 4B Measurement Scavenger Hunt
- 4C Target One Thousand

