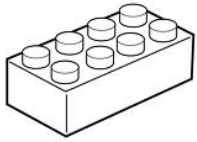


Exploring Equivalent Fractions with LEGOS

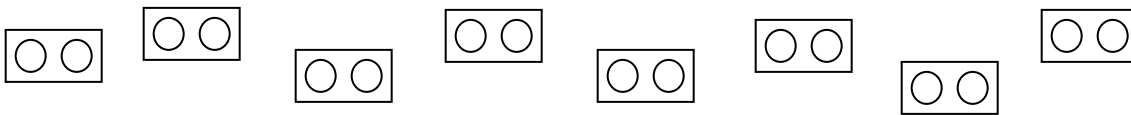
Lego Terminology Tips: A round peg on top of a Lego is called a “stud.” We can name Lego bricks by their stud dimensions.



Warm up:

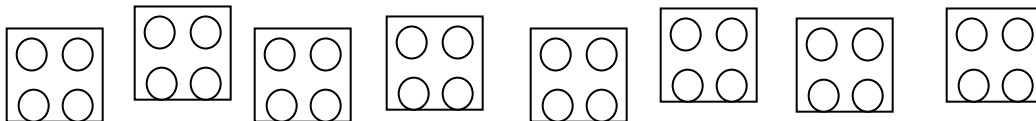
This piece has _____ studs. It is a ___ by ___ brick.

Take a bag of eight **1 by 2 bricks**. Color the bricks below to match the bag.



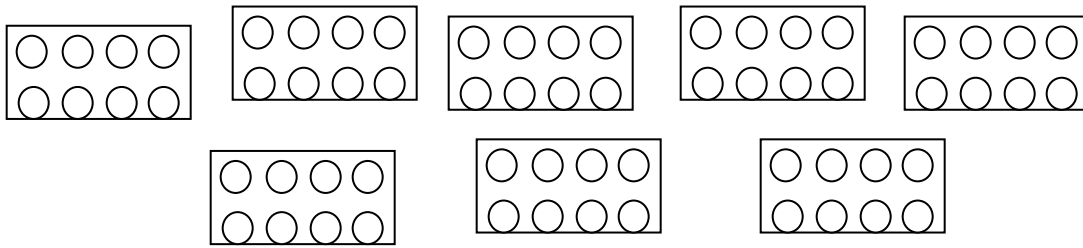
Brick Colors	Fraction of Total Bricks (Out of 8)	Fraction of Total Studs (Out of 16)

Take a bag of eight **2 by 2 bricks**. Color the bricks below to match the bag.



Brick Colors	Fraction of Total Bricks (Out of 8)	Fraction of Total Studs (Out of 32)


Take a bag of eight **2 by 4 bricks**. Color the bricks below to match the bag.





Brick Colors	Fraction of Total Bricks (Out of 8)	Fraction of Total Studs (Out of 64)

Take a bag of labeled “**12-Stud Whole**” and use those bricks for the following work.

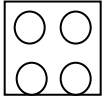
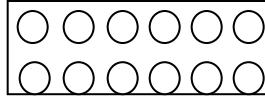
This 2 by 6 brick equals **1 whole** for these examples.

 How many 1-by-1 bricks cover 1 whole? _____
 What fraction of the whole is a 1-by-1 brick? _____

 How many 1-by-2 bricks cover 1 whole? _____
 What fraction of the whole is a 1-by-2 brick? _____

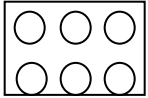
 How many 1-by-3 bricks cover 1 whole? _____
 What fraction of the whole is a 1-by-3 brick? _____

This 2 by 6 brick equals **1 whole** for these examples.



How many 2-by-2 bricks cover 1 whole? _____

What fraction of the whole is a 2-by-2 brick? _____



How many 2-by-3 bricks cover 1 whole? _____

What fraction of the whole is a 2-by-3 brick? _____

Which brick is $\frac{2}{3}$ of one whole? (Draw the brick.)

Which brick is $\frac{5}{6}$ of one whole? (Draw the brick.)

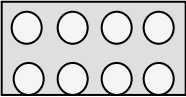

Draw three different ways to make one whole using the bricks in your bag.

Label each part of your drawings with the fraction names of the parts.



<p>Example:</p>	

Take a bag of “mixed bricks.” Use the mixed bricks to solve each of the following challenges.

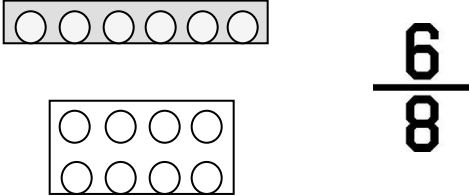
Find six different ways to show $\frac{1}{2}$ with your mixed Lego bricks.
 Draw each of the ways in the space below. One example has been done for you.

  $\frac{4}{8}$	

Find six different ways to show $\frac{1}{4}$ with your mixed Lego bricks.
 Draw each of the ways in the space below. One example has been done for you.

  $\frac{1}{4}$	

Find four different ways to show $\frac{3}{4}$ with your mixed Lego bricks.
You should only use two bricks for each way.
Draw each of the ways in the space below. One example has been done for you.

 <p>$\frac{6}{8}$</p>	

Find four different ways to show $\frac{1}{3}$ with your mixed Lego bricks.
You should only use two bricks for each way.
