

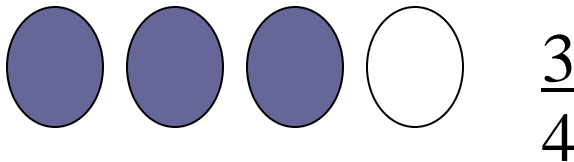
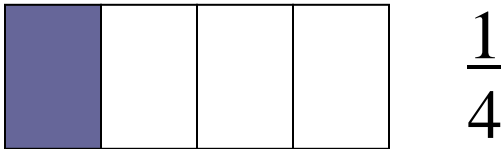
Lesson: Fractions

Third Grade Objective: Use area or region models and set models of fractions to explore part-whole relationships. Represent fractions concretely and symbolically (halves, fourths, eighths, thirds, sixths).

Lesson

Fractions are parts of a whole. You can find $\frac{2}{3}$ of a whole, $\frac{1}{6}$ of a whole, $\frac{3}{7}$ of a whole and so much more! What is a whole? It can be a candy bar, a classroom full of students, a bag of jellybeans, or a picture!

What part of each picture is shaded?



The **numerator** (the top number in a fraction) tells how many parts are shaded. The **denominator** (the bottom number in a fraction) tells how many parts there are altogether (shaded and not shaded).

You can even find fractional parts of a word.

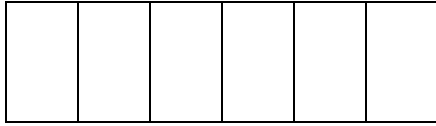
- Look at the words “half” and “so”.
- The word “half” contains four letters, so the denominator will be 4.
- The first $\frac{1}{4}$ of the letters in the word “half” is h.
- The first $\frac{1}{2}$ of the word “half” is ha.
- The word “so” contains two letters so the denominator will be 2.
- The first $\frac{1}{2}$ of the word “so” is the letter s.
- If you combine the first $\frac{1}{2}$ of the word “half” and the first $\frac{1}{2}$ of the word “so” you get the word “has”.

Here’s another example:

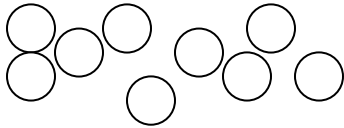
- Look at the word “elephant”
- The word contains eight letters so the denominator will be 8.
- The first $\frac{5}{8}$ of the word spells “eleph”. The final $\frac{3}{8}$ of the word spells what? “ant”

Now you try!

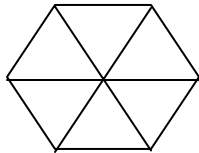
1. Shade $\frac{2}{6}$ of the candy bar :



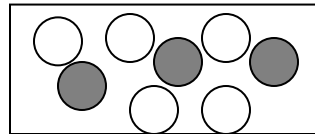
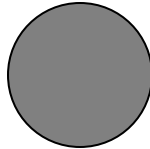
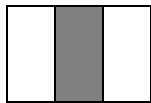
2. Shade $\frac{4}{9}$ of the jellybeans



3. Shade $\frac{4}{6}$ of the hexagon



4. Circle the polygons that show less than $\frac{1}{2}$ shaded:



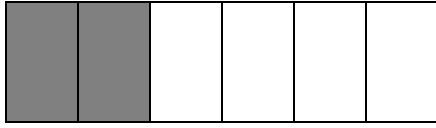
5. Find the first $\frac{3}{10}$ of the word management _____
6. Find the first $\frac{2}{8}$ of the word umbrella _____
7. Mrs. Thompson has 12 boys in her class. $\frac{1}{3}$ of them are wearing jeans today.
How many are wearing jeans today?

The NCTM website has online activities and resources for students. This page has several different activities for representing and exploring fractions.

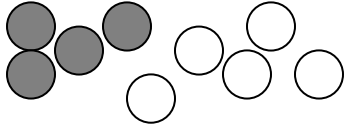
<http://illuminations.nctm.org/Activities.aspx?grade=2&srchstr=fractions>

Check Your Answers

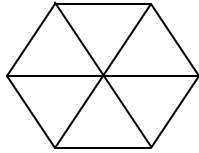
1. Shade $\frac{2}{6}$ of the candy bar :



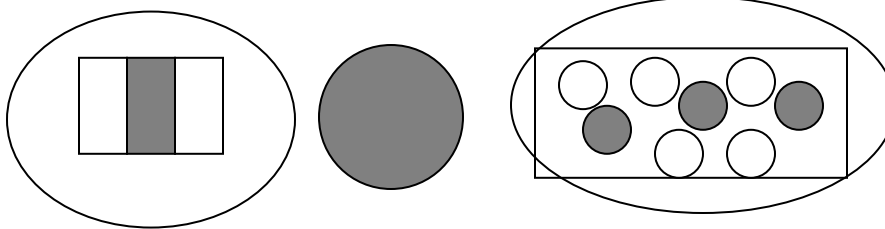
2. Shade $\frac{4}{9}$ of the jellybeans



3. Shade $\frac{4}{6}$ of the hexagon



4. Circle the polygons that show less than $\frac{1}{2}$ shaded:



5. Find the first $\frac{3}{10}$ of the word management **man**____
6. Find the first $\frac{2}{8}$ of the word umbrella **um**____
7. Mrs. Thompson has 12 boys in her class. $\frac{1}{3}$ of them are wearing jeans today.
How many are wearing jeans today? $\frac{1}{3}$ of 12 = 4