

Modeling and Explaining Fractions

Toolkit Note Catcher

Session #1

Sharing Task #1

Suppose there was one candy bar to be shared among four (4) children so each child gets the same amount. Show how much each child would get by folding your paper strip.

There are _____ parts that make 1 candy bar, so each of those parts is called a _____.

Sharing Task #2

Suppose there was one candy bar to be shared among three (3) children so each child gets the same amount. Show how much each child would get by folding your paper strip.

There are _____ parts that make 1 candy bar, so each of those parts is called a _____.

Sharing Task #3

James and his sister want to do some arts and crafts. He has one brick of clay to split equally between himself and his sister. Use the tape diagram below to show what the brick will look like and name the fractional unit.



There are _____ parts that make 1 brick of clay, so each of those parts is called a _____.

Session #1 Practice

Directions: Decide how to partition (split) the tape diagrams using the given fractional unit.

Fourths:



Thirds:



Fifths:



Halves:



Sixths:



Eighths:



Session #2

Naming a Fraction Task #1

José has a long piece of ribbon for an art project. He wants to split the ribbon equally to make six (6) projects. What fraction of the ribbon will each art project need?

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There are ____ parts that make the whole ribbon, so each of those parts is called a _____.

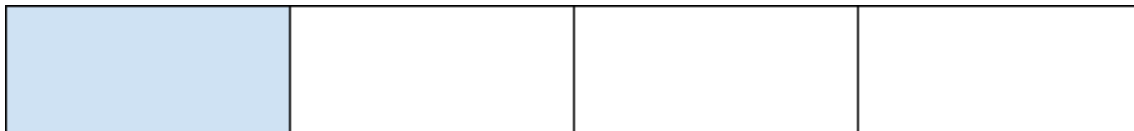
A **fraction** is a special type of number that describes an amount between the values of whole numbers.

What fraction of the ribbon will each project need? _____

_____ ← **how many parts are being counted**
 ← **how many parts to make 1 whole**

Session #2: Practice

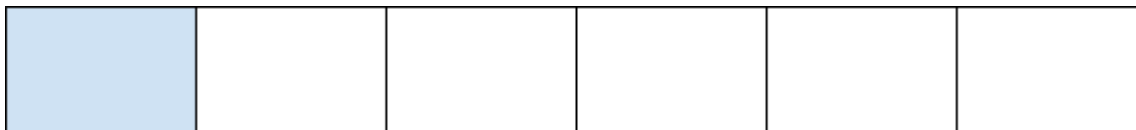
Directions: Name the fraction that is shaded in each model.



Fraction shaded above:



Fraction shaded above:



Fraction shaded above:

Directions: Partition (split) and shade each tape diagram to model the given fraction.

$$\frac{1}{2}$$



$$\frac{1}{4}$$



$$\frac{1}{3}$$



Discussion time: Using what you know about the meaning of the numbers in a fraction, consider why $\frac{1}{4}$ is smaller than $\frac{1}{3}$. Feel free to use your models to help your explanation.

Session #3

Composing (Building) Task #1

Trace and label your $\frac{1}{5}$ block below:

Now, use your $\frac{1}{5}$ block to build 1 whole on your model above.

Composing (Building) Task #2

How might we name the fraction if we were counting **two (2)** of these parts on our model? How might we shade our model to show we are counting **two (2)** of these parts? Revise your model as needed and write your new fraction below.

_____ ← **how many parts are being counted**
 ← **how many parts to make 1 whole**

$\frac{2}{5}$ is formed by counting _____ parts that are each one _____ in size.

Note: If we are only counting one part, we call this a **unit fraction**. If we are counting more than one part, we call this a **non-unit fraction**.

Session #3 Practice A

Directions: Partition (split) then use shading to represent the given fraction.

$$\frac{2}{3}$$



$\frac{2}{3}$ is formed by counting _____ parts that are each one _____ in size.

$$\frac{3}{5}$$



$\frac{3}{5}$ is formed by counting _____ parts that are each one _____ in size.

$$\frac{5}{6}$$



$\frac{5}{6}$ is formed by counting _____ parts that are each one _____ in size.

Directions: Copy your fractional unit to build 1 whole. Label each part with the appropriate fraction.



$$\frac{0}{4}$$

$$\frac{1}{4}$$



$$\frac{0}{2}$$

Session #3 Practice B

$\frac{2}{3}$ ← Numerator (how many parts are being counted)

3 ← Denominator (how many parts to make 1 whole)

Directions: Complete the missing information in each row.

Fraction	Tape Diagram	Numerator	Denominator
			
		3	4
$\frac{2}{5}$			
		7	8