LESSON MAKER PRO

Fraction Building Blocks

Break fractions into equal unit parts.

GRADE 3 · TEKS 3.3.D

3.3.D "compose and decompose a fraction a/b with a numerator greater than zero and less than or equal to b as a sum of parts 1/b;"

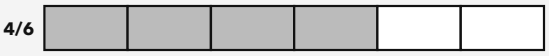
NAME _____ DATE _____

BUILD WITH UNIT FRACTIONS

A unit fraction has 1 as its numerator, such as 1/9. To decompose a fraction, keep the same denominator and add the needed number of unit fractions. The numerator tells how many unit parts to add.

WORKED EXAMPLE

Write 4/6 as a sum of unit fractions.



1. The denominator is 6, so each unit part is 1/6.
2. The numerator is 4, so use four unit parts.
3. Add four 1/6 parts.

Answer: 4/6 = 1/6 + 1/6 + 1/6 + 1/6

PRACTICE 6 problems

1 Write 3/5 as a sum of unit fractions.

ANSWER _____

2 Fill in the blanks. 2/3 = ___ + ___.

ANSWER _____

3 Write 5/8 as a sum of unit fractions.

ANSWER _____

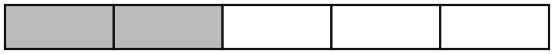
4 Which sum equals 3/7? Circle one. A. 1/7 + 1/7 B. 1/7 + 1/7 + 1/7 C. 1/7 + 1/7 + 1/7 + 1/7 + 1/7

ANSWER _____

5 Fill in the blank. ___/2 = 1/2 + 1/2.

ANSWER _____

6 Look at the shaded fraction bar. Write the shaded fraction as a sum of unit fractions.



ANSWER _____

APPLY IT Show your work

1 A game board has 8 equal spaces. Kai moves forward 3 of the spaces. What fraction of the board did Kai move? Write the fraction as a sum of unit fractions.

WORK SPACE

ANSWER _____

2 A bracelet has 7 equal sections. Nia decorates 5 sections with beads. Write the decorated part as a sum of unit fractions.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A student writes 7/9 = 3/9 + 3/9 + 1/9. Rewrite 7/9 as a sum using only unit fractions. Explain why your sum has seven addends.

WORK SPACE AND ANSWER

ANSWER KEY

Fraction Building Blocks

GRADE 3 · TEKS 3.3.D

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Write 3/5 as a sum of unit fractions.	**3/5 = 1/5 + 1/5 + 1/5**
2	Fill in the blanks. 2/3 = ___ + ___.	**2/3 = 1/3 + 1/3**
3	Write 5/8 as a sum of unit fractions.	**5/8 = 1/8 + 1/8 + 1/8 + 1/8 + 1/8**
4	Which sum equals 3/7? Circle one. A. 1/7 + 1/7 B. 1/7 + 1/7 + 1/7 C. 1/7 + 1/7 + 1/7 + 1/7 + 1/7	**B. 1/7 + 1/7 + 1/7**
5	Fill in the blank. ___/2 = 1/2 + 1/2.	**2/2**
6	Look at the shaded fraction bar. Write the shaded fraction as a sum of unit fractions.	**2/5 = 1/5 + 1/5**

PART 2 · APPLY IT

1. **3/8 = 1/8 + 1/8 + 1/8** Kai moved 3 out of 8 equal spaces, so the fraction is 3/8. Break it into three unit fractions with denominator 8.
2. **5/7 = 1/7 + 1/7 + 1/7 + 1/7 + 1/7** The bracelet has 7 equal sections, and 5 are decorated, so the fraction is 5/7. Use five 1/7 parts.

CHALLENGE

7/9 = 1/9 + 1/9 + 1/9 + 1/9 + 1/9 + 1/9 + 1/9. It has seven addends because the numerator 7 tells how many 1/9 parts are needed.

Accept unit-fraction sums written in any order. Each addend must be 1 over the original denominator, and the number of addends must match the numerator.