LESSON MAKER PRO

Shade to Decimal

Connect shaded parts, fractions, and decimals.

GRADE 4 · 4.N.3.6

4.N.3.6 "Represent tenths and hundredths with concrete and pictorial models, making connections between fractions and decimals."

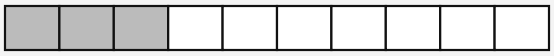
NAME _____ DATE _____

PARTS OF ONE WHOLE

When a whole has 10 equal parts, each part is one tenth. When it has 100 equal parts, each part is one hundredth. Count the shaded parts to write a fraction, then write the fraction as a decimal.

WORKED EXAMPLE

What fraction and decimal of the bar is shaded?



1. Count 3 shaded parts out of 10.
2. Write the fraction: 3/10.
3. Write the decimal: 0.3.

Answer: 3/10 = 0.3

PRACTICE 4 problems

1 Write 4/10 as a decimal.

ANSWER _____

2 Write 52/100 as a decimal.

ANSWER _____

3 Write 0.8 as a fraction with 10 as the denominator.

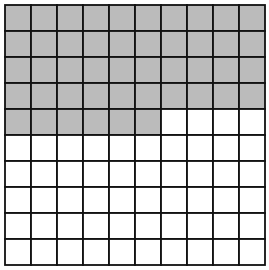
ANSWER _____

4 Write 0.09 as a fraction with 100 as the denominator.

ANSWER _____

APPLY IT Show your work

1 On a game map, shaded squares show treasures found. What fraction and decimal of the squares are shaded?



ANSWER _____

2 A prize ribbon has a shaded part. What fraction and decimal of the ribbon is shaded?



ANSWER _____

CHALLENGE One step up

Maya says 0.5 and 0.50 are different amounts because 50 is greater than 5. Is she right? Explain using fractions.

WORK SPACE AND ANSWER

ANSWER KEY

Shade to Decimal

GRADE 4 · 4.N.3.6

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Write 4/10 as a decimal.	**0.4**
2	Write 52/100 as a decimal.	**0.52**
3	Write 0.8 as a fraction with 10 as the denominator.	**8/10**
4	Write 0.09 as a fraction with 100 as the denominator.	**9/100**

PART 2 · APPLY IT

1. **46/100 and 0.46** There are 46 shaded squares out of 100. The fraction 46/100 is 0.46.
2. **7/10 and 0.7** Seven of the 10 equal parts are shaded, so the shaded part is 7/10, or 0.7.

CHALLENGE

No. 0.5 is 5/10, and 0.50 is 50/100. Both fractions show one half of a whole.

For the word problems, accept equivalent fractions if the decimal is correct. In the challenge, accept any correct explanation that 5/10 and 50/100 represent the same amount.