LESSON MAKER PRO

Decimal Model Match

Connect shaded parts, fractions, and decimals.

GRADE 5 · 5.N.1.1

5.N.1.1 "Represent decimal fractions (e.g., 1/10, 1/100) using a variety of models (e.g., 10 by 10 grids, base-ten blocks, meter stick) and show the rational number relationships among fractions, decimals, and whole numbers."

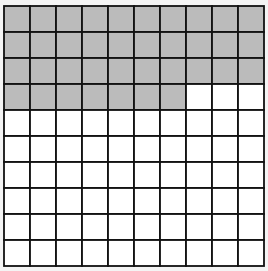
NAME _____ DATE _____

PARTS OF A WHOLE

A 10 by 10 grid has 100 squares, so each square is 1/100 of the whole. To write hundredths as a decimal, put the number of hundredths in the two places after the decimal point.

WORKED EXAMPLE

What fraction and decimal does the shaded part of the grid show?

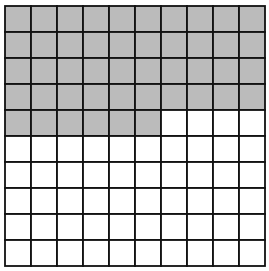


1. The whole grid has 100 squares.
2. 37 shaded squares represent 37/100.
3. 37/100 is 0.37.

Answer: 37/100 and 0.37

PRACTICE 6 problems

1 Write the shaded part as a fraction in hundredths and as a decimal.



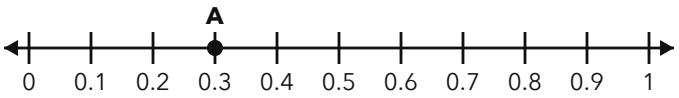
ANSWER _____

2 Write the shaded part as a fraction in tenths and as a decimal.



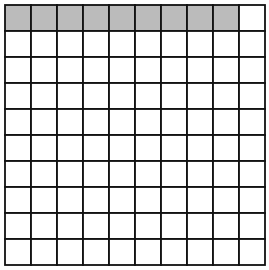
ANSWER _____

3 Write the location of A as a fraction in tenths and as a decimal.



ANSWER _____

4 Write the shaded part as a fraction in hundredths and as a decimal.



ANSWER _____

5 Write 2 wholes and 6/10 as a decimal and as a fraction in tenths.

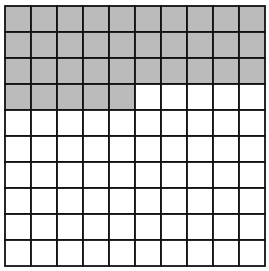
ANSWER _____

6 Put 3/10, 0.25, and 1 whole in order from least to greatest.

ANSWER _____

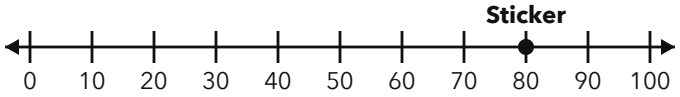
APPLY IT Show your work

1 A game gives you 1 full energy bar plus the shaded part of another bar. Write your total energy in bars as a decimal and as a fraction in hundredths.



ANSWER _____

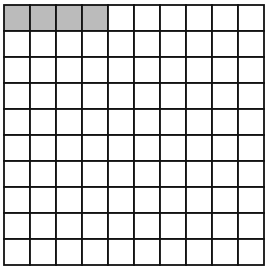
2 A sticker marks a spot on a 1-meter stick. The numbers on the stick show centimeters, and 1 meter is 100 centimeters. Write the sticker's distance from 0 as a fraction of a meter in hundredths and as a decimal.



ANSWER _____

CHALLENGE One step up

A game score shows 2 full bars plus the shaded part of a third bar. Mia says the score is 2.4. Explain in two sentences whether Mia is correct, and give the score as a decimal and a fraction in hundredths.



WORK SPACE AND ANSWER

ANSWER KEY

Decimal Model Match

GRADE 5 · 5.N.1.1

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Write the shaded part as a fraction in hundredths and as a decimal.	**46/100 and 0.46**
2	Write the shaded part as a fraction in tenths and as a decimal.	**7/10 and 0.7**
3	Write the location of A as a fraction in tenths and as a decimal.	**3/10 and 0.3**
4	Write the shaded part as a fraction in hundredths and as a decimal.	**9/100 and 0.09**
5	Write 2 wholes and 6/10 as a decimal and as a fraction in tenths.	**2.6 and 26/10**
6	Put 3/10, 0.25, and 1 whole in order from least to greatest.	**0.25, 3/10, 1 whole**

PART 2 · APPLY IT

1. **1.35 bars and 135/100 bars** The shaded grid adds 35/100 of a bar to 1 whole bar. The total is 135/100, or 1.35 bars.
2. **80/100 meter and 0.80 meter** The sticker is 80 centimeters from 0, which is 80/100 of a meter. As a decimal, that is 0.80 meter.

CHALLENGE

Mia is not correct because 4 shaded squares out of 100 represent 4/100, not 4/10. The score is 2.04, or 204/100.

Accept equivalent decimal forms such as 0.70 for 0.7 and 0.8 for 0.80. Where a problem asks for tenths or hundredths, the fraction must use that denominator.