LESSON MAKER PRO

Decimal Percent Match

Connect decimals, percents, and visual models.

GRADE 6 · 6.NS.1.b

6.NS.1.b "Represent and determine equivalencies among decimals (through the thousandths place) and percents incorporating the use of number lines, and concrete and pictorial models.*"

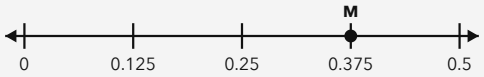
NAME _____ DATE _____

MOVE BETWEEN FORMS

A percent means "out of 100." To change a decimal to a percent, multiply by 100, or move the decimal point two places right. To change a percent to a decimal, divide by 100, or move the decimal point two places left.

WORKED EXAMPLE

Point M is shown on the number line. Write its decimal and percent.



1. Point M is at 0.375.
2. Multiply by 100: 0.375 × 100 = 37.5.
3. Write the percent sign: 37.5%.

Answer: 0.375 = 37.5%

PRACTICE 6 problems

1 Write 0.46 as a percent.

ANSWER _____

2 Write 72% as a decimal.

ANSWER _____

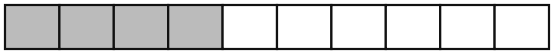
3 Write 0.008 as a percent.

ANSWER _____

4 Write 6.5% as a decimal.

ANSWER _____

5 The shaded model shows part of one whole. Write the shaded amount as a decimal and a percent.



ANSWER _____

_____

6 Point N is shown on the number line. Write its decimal and percent.



ANSWER _____

_____

APPLY IT Show your work

1 A game update progress bar shows that 0.275 of the download is complete. What percent of the download is complete?

WORK SPACE

ANSWER _____

2 In a student council poll, 48.6% of students chose a new recess activity. Write 48.6% as a decimal.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Explain why 0.057 and 5.7% are equivalent. Then compare 5.7% and 0.57 using <, >, or =.

WORK SPACE AND ANSWER

ANSWER KEY

Decimal Percent Match

GRADE 6 · 6.NS.1.b

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Write 0.46 as a percent.	**46%**
2	Write 72% as a decimal.	**0.72**
3	Write 0.008 as a percent.	**0.8%**
4	Write 6.5% as a decimal.	**0.065**
5	The shaded model shows part of one whole. Write the shaded amount as a decimal and a percent.	**0.4 and 40%**
6	Point N is shown on the number line. Write its decimal and percent.	**0.6 and 60%**

PART 2 · APPLY IT

1. **27.5%** Multiply 0.275 by 100. The equivalent percent is 27.5%.
2. **0.486** Divide 48.6 by 100, or move the decimal point two places left. This gives 0.486.

CHALLENGE

5.7% means 5.7/100, which is 0.057. Therefore, 5.7% < 0.57.

Accept equivalent decimals with trailing zeros, such as 0.460 for 0.46. For the challenge, accept any correct explanation that shows dividing 5.7 by 100 gives 0.057.