Unit: Rates and Percents
Student Handout 5

Name _____

Date _____Pd_____

MODELING PERCENTS

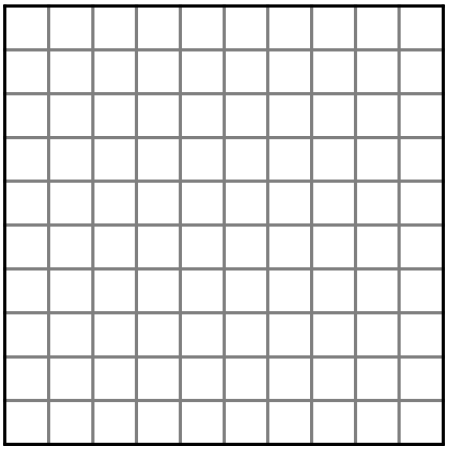
PERCENTAGES

- Percent is a part to whole ratio, where the whole is always _____.
- Each percent can be modeled on a 10x10 grid and can also be written as a _____.

Ex: $78\% = \frac{78}{100}$ = "seventy-eight hundredths" = 0.78

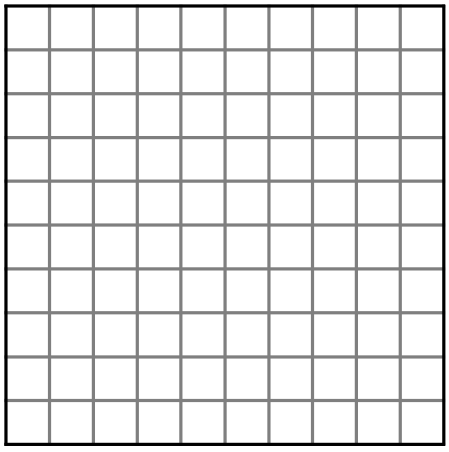
Use the hundreds squares below to model each percentage. Then, complete the different representations below.

50%



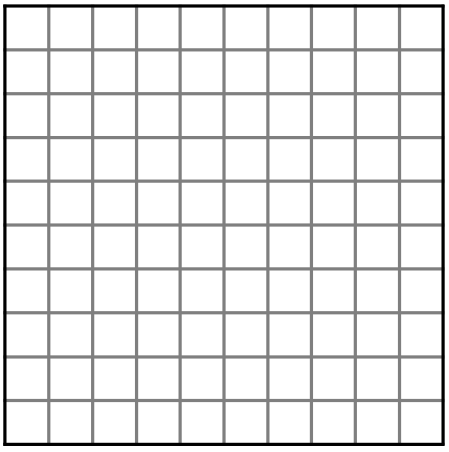
$\frac{\text{part}}{\text{whole}}$: _____

35%



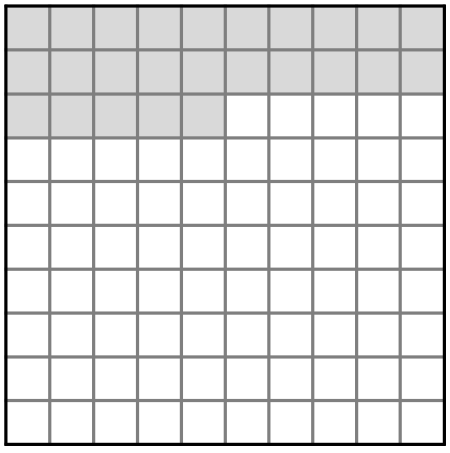
$\frac{\text{part}}{\text{whole}}$: _____

10%



$\frac{\text{part}}{\text{whole}}$: _____

1. Use the percent model at the right to answer the questions below.



a. How many squares are shaded?

b. What is the ratio of the shaded squares to total squares?

c. How could you represent the shaded squares as a percent?

d. If the shaded squares represent _____ percent, then what percent do the unshaded squares represent?

CONVERTING BETWEEN PERCENTS AND DECIMALS

- A percent can be written over 100, and then read out loud.

Ex: $\frac{45}{100}$ = "forty-five hundredths" = 0.45

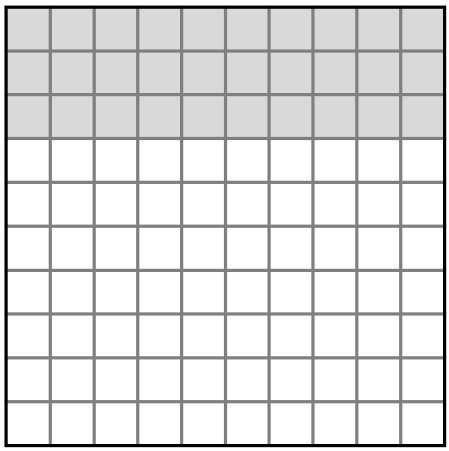
- A percent can also be divided by 100, which is the same as moving the decimal _____ .

Ex: 45% = 0.45 87% = 0.87 150% = 1.5

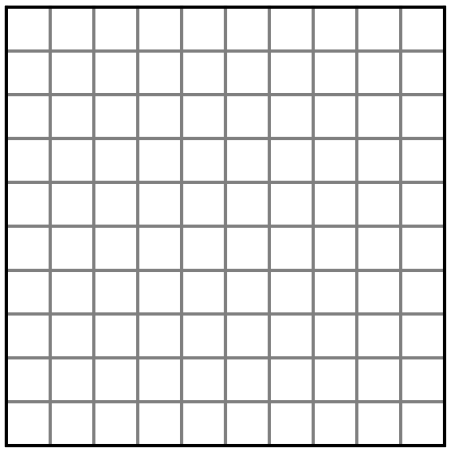
Use your understanding of converting between percents and decimals to answer the questions below.

2. 70% = _____	3. 16% = _____	4. 37% = _____
5. 0.28 = _____	6. 0.62 = _____	7. 0.90 = _____

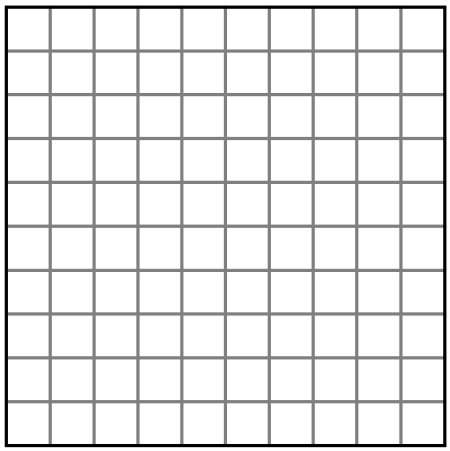
Use the information given in each column to complete the missing representations.



$\frac{\text{part}}{\text{whole}}$: _____
percent: _____
decimal: _____



$\frac{\text{part}}{\text{whole}}$: _____
percent: 75%
decimal: _____



$\frac{\text{part}}{\text{whole}}$: $\frac{45}{100}$
percent: _____
decimal: _____

8. Todd wrote the statement below but made an error. Describe his mistake and correct his work.

50% = 5.0

_____

_____

_____

Summarize today's lesson:

Unit: Rates and Percents
Homework 5

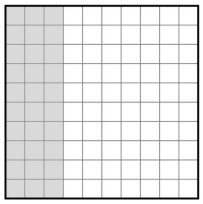
Name _____

Date _____ Pd _____

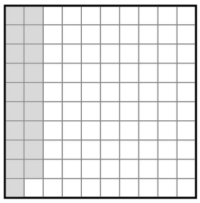
MODELING PERCENTS

Elise is playing memory with math cards. There are two versions of each percent represented below. Record the matches at the bottom of the page.

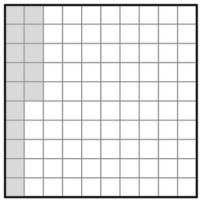
A



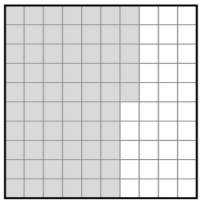
B



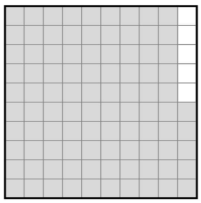
C



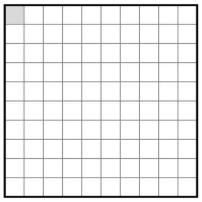
D



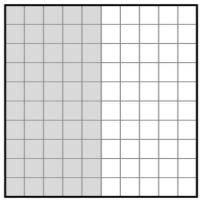
E



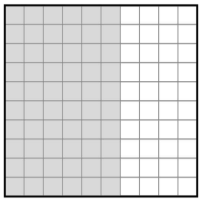
F



G



H



I

0.15

J

$\frac{65}{100}$

K

0.19

L

$\frac{50}{100}$

M

$\frac{30}{100}$

N

0.60

O

0.01

P

0.95

A	
	%

B	
	%

C	
	%

D	
	%

E	
	%

F	
	%

G	
	%

H	
	%