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VALUE 100% 10% 1% On board or chart write a value and then below it write vertically **100 % 10% 1%**.

\$154.60 quantity Use what you know to find:

100% = **50%** = **41%** =
10% = **25%** = **117%** =
1% = **5%** = **245%** =

Ask students “What do you notice?” PARTNER TALK...share out. “What pattern/s do you see?” PARTNER TALK...share out. How are you thinking about finding the percent? PARTNER TALK...share out.

REAL-WORLD APPLICATION: Your family goes to dinner and wants to leave a tip.

Dinner bill = \$62.00 For good service **add 15% tip**
 “Use what you know” 100% 10% 1% to find the tip. (Example: 10% or one-tenth of the bill = 6.20; half of that amount = 3.10; TOTAL TIP = \$9.30)
 (What if it were great service? How might you think about/find a 20% tip?)

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MAKING CONNECTIONS:

Express each percent as a fraction and as a decimal. Then solve using the value given.

Using the value 420, have partners find:

100% = $\frac{100}{100}$ or 1 or 1.0	100% of 420 =	(420)
50% = $\frac{50}{100}$ or $\frac{1}{2}$ or 0.5	50% of 420 =	(210)
10% = $\frac{10}{100}$ or $\frac{1}{10}$ or 0.1	10% of 420 =	(42)
1% = $\frac{1}{100}$ or 0.01	1% of 420 =	(4.2)

Ask students “What do you notice?” PARTNER TALK...share out. “What pattern/s do you see?” PARTNER TALK...share out. “What if it were 20%? What would the quantity be? How do you know?” “What strategy might you use?” PARTNER TALK...share out.

“USE WHAT YOU KNOW” TO TRY ON ADDITIONAL VALUES.

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Using what you know about parts of a whole/percent...

100% 10% 1%

Find percent of a whole:

Have students think individually about how they would find the amount. Share strategy with a partner. Share out as a class.

125% of 64 (80)

Doing and Undoing...

If you have 80 and that is 125% of an amount, what do you know about the unknown amount? PARTNER TALK...share out.

12.5% of 56 (7) *Possible Thinking: 10% + 2.5%...10% = 5.6 5% = 5.6/2 or 2.8
2.8/2 = 1.4 5.6 + 1.4 = 7*

3% of 12 (0.36) *Possible Thinking: 1% = 0.12 x 3 = 0.36*

**Students work with a partner. Share strategies/answers with other partnerships.
Discuss as class.**

REAL-WORLD CONNECTION:

You buy a DVD player for \$36.00. You must pay the sales tax on this amount.

If the sales tax is 7%, what would the tax be? Students think individually and share strategy with a partner. Have partners share out.

*Example: Mental Math 10% = \$3.60, ½ of that = 5% or \$1.80. 1% = 0.36, 2% = 0.72
\$1.80 plus \$0.72 equals a tax of \$2.52 (OR change to decimal; use multiplication).*

What would you pay for the DVD player? (\$38.52)

Topic: PERCENT

Vocabulary Development

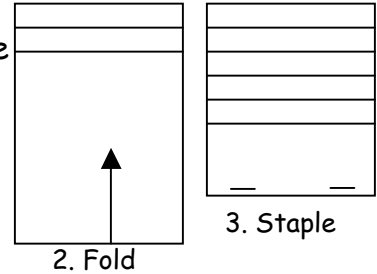
Real Life Application	Visual Representation
Synonyms or Examples of What It Is	Antonyms or Examples of What It Is Not
Definition	

Vocabulary Term:

PERCENT

FOLDABLE

1. Take three pieces of typing paper (different colors if possible). Stack the sheets of paper so that the back sheet is one inch higher than the center sheet that is one inch higher than the last sheet.
2. Bring the bottom of the sheets upward and align the edges so that all of the layers are the same distance apart. Fold papers and crease well.
3. Staple across the fold to hold the sheets together.



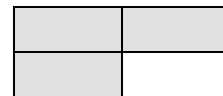
RATIONAL NUMBERS	
	FRACTIONS
	DECIMALS
	PERCENTS
	FRACTIONS → DECIMALS
	FRACTIONS → DECIMALS → PERCENTS

Example - as you lift each page, information, pictures, drawings, definitions, etc. are included that describe each term, i.e.

FRACTIONS:

This rectangle represents 1 whole.

The whole is divided into 4 equal parts. $\frac{4}{4} = 1$



Three (3) of the 4 parts are shaded. This represents $\frac{3}{4}$ of the whole.

One (1) part is not shaded. This represents $\frac{1}{4}$ of the whole.

Further examples could include equivalent fractions, improper fractions, mixed numbers, etc. Foldables can be used to foster engagement and as a resource to support/build upon understanding of a variety of concepts.