

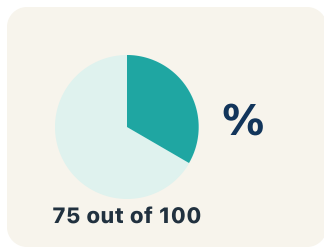
Percents Greater Than 100% and Less Than 1%

Lesson 4-3

Name: _____ **Date:** _____ **Class:** _____

Key Vocabulary Level 2 Standard

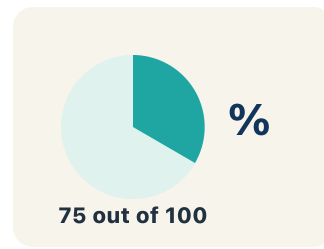
Picture first, then the word, then a plain-language meaning. Say each word out loud.



45% means 45 out of 100

Percent

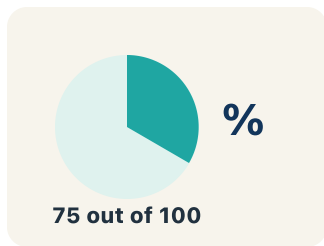
Write the definition:



150% means 1.5 times the whole

Greater than 100%

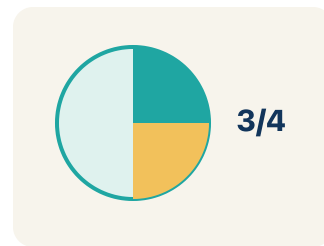
Write the definition:



0.5% of 1,000 = only 5 items – a tiny sliver

Less than 1%

Write the definition:



150% = 1.5 = 3/2

Equivalent

Write the definition:

$$1 \frac{1}{2}$$

whole + fraction

$$150\% = 1 \text{ and } 1/2 = 1.5$$

Mixed number

Write the definition:

Guided Notes Level 2 Standard



WHAT WE'RE LEARNING TODAY

I can write and interpret percents greater than 100% and less than 1%.



Fill in each blank as we go. Use the Word Bank to help you.



WORD BANK – FILL EACH BLANK WITH THE BEST WORD

Percent

Greater than 100%

Less than 1%

Equivalent

Mixed number



Tap any word to see what it means and a picture.

1 A number out of 100, written with a % sign, is a .

2 A percent that represents more than one whole, like 150%, is

.

3 A percent smaller than one out of a hundred, like 0.5%, is

.

4 Values that name the same amount, like 0.5% and 0.005, are

.

5 A number with a whole part and a fraction part, like $1\frac{1}{2}$, is a

.



Watch & Try – Worked Examples

See the notes in action: watch one worked all the way through, then try the next with the same steps.

 **I do – watch**

Follow each step as your teacher solves it.

Problem: Which of the following is greater than 100%?

- A. 0.75
- B. $\frac{3}{4}$
- C. 1.25
- D. $\frac{99}{100}$

Step 1 1.25 = 125%, which is greater than 100%.

Step 2 The other values are all less than 1 (less than 100%).


 **Answer:** C. 1.25

 **Try – put the steps in order**

Drag the cards (or use the ▲ ▼ buttons) to put the solution steps in the right order, then press **Check**.

The other values are all less than 1 (less than 100%).

1.25 = 125%, which is greater than 100%.

 **We do – together**

Solve this one with your class using the same steps.

Problem: What is 200% written as a decimal?

- A. 2.0
- B. 0.2
- C. 20.0
- D. 0.02

Step 1 _____

Step 2 _____

Answer: _____

 **You do — your turn**

Now try one on your own. Show every step.

Problem: What is 0.5% written as a decimal?

- A. 0.005
- B. 0.05
- C. 0.5
- D. 5.0

Show your work:

Try It

Solve on your own. Check the answer key when you are done.

1. A rare game item has a 0.5% drop chance. What is 0.5% written as a decimal?

- A. 0.005
- B. 0.05
- C. 0.5
- D. 5

Show your work:

2. Could this really happen? Your phone shows it is charged to 0.5% — about how much of a 4,000 mAh battery is that?

- A. About 20 mAh — a tiny sliver, almost empty
- B. About 2,000 mAh — half full
- C. About 4,200 mAh — more than full
- D. About 200 mAh — a quarter full

Show your work:

Stretch Your Thinking

Level 2 enrichment

Challenge task — explain your reasoning in full sentences.

A game character has 300% of its original health after picking up a power-up. If the original health was 80 points, how many health points does the character have now? A student says 240 points. Another says 380 points. Who is correct and why?

Sentence starter: The student who said ____ is correct because 300% means ____ times the original, so ____ $\times 80 =$ ____.

Show your work:

Reflect — Exit Ticket

Which statement is true about 0.25%?

- A. It equals 0.0025 as a decimal
- B. It equals 0.25 as a decimal
- C. It equals $\frac{1}{4}$ as a fraction
- D. It is greater than 1%

Your answer:
