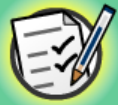


$$5 \times 7 = 35$$
$$20 + 2 = 22$$

Introducing Decimals



Common core icons



This icon indicates a slide where the Standards for Mathematical Practice are being developed. Details of these are given in the Notes field.



Slides containing examples of mathematical modeling are marked with this stamp.



This icon indicates an opportunity for discussion or group work.

The **Standards for Mathematical Practice** outlined in the Common Core State Standards for Mathematics describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

These are:

- 1) Make sense of problems and persevere in solving them.**
- 2) Reason abstractly and quantitatively.**
- 3) Construct viable arguments and critique the reasoning of others.**
- 4) Model with mathematics.**
- 5) Use appropriate tools strategically.**
- 6) Attend to precision.**
- 7) Look for and make use of structure.**
- 8) Look for and express regularity in repeated reasoning.**



This icon indicates that the slide contains activities created in Flash. These activities are not editable.



This icon indicates teacher's notes in the Notes field.

Nicole has \$1. If she splits her money equally between two friends, how much will Nicole give to each friend?



Each friend will get **half a dollar**.

How would we write this down?

\$0.50

We separate the 0 and 5 with a **decimal point**.

We use **decimals** to show parts of whole numbers.





You might be used to writing parts of whole numbers as **fractions**, like this:





Let's compare **fractions** and **decimals**!
Press any of the fraction or decimal cards
to hide them. Press again to reveal.
Drag the number line to move left or right.

Press **start** to begin.

start

tenths

hundredths



Decimal fraction pairs

Match each number to its equivalent.

$$\frac{1}{100}$$

$$\frac{5}{10}$$

0.02

0.17

0.8

$$\frac{8}{10}$$

$$\frac{17}{100}$$

0.62

0.5

0.01

0.28

$$\frac{2}{100}$$

$$\frac{1}{10}$$

0.1

$$\frac{62}{100}$$

$$\frac{28}{100}$$





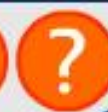
Can you use the colored grid to work out the **decimal** and the **fraction**?

Press the yellow cards to reveal the digits, and press the green arrows to change the digits.


Press **start** to begin.

start

100



We call the numbers after the decimal point **tenths** and **hundredths**.



hundreds	tens	ones	tenths	hundredths
1	0	4	2	5

How many **tenths** and **hundredths** are there in this number?

Can you write this number as a fraction?



Place value grid



1000s

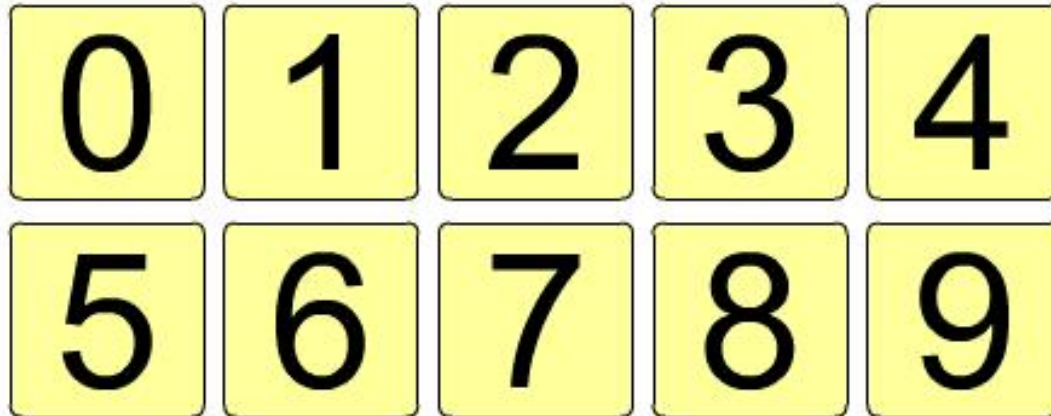
100s

10s

1s

$\frac{1}{10}$ s

$\frac{1}{100}$ s



Which is bigger?



For part of his homework, Alex needs to compare these numbers:

0.68 0.45 1.87 3.16



I think **0.68** is larger than **0.45**,
because 68 is larger than 45.

I think **1.87** is larger than **3.16**,
because 87 is larger than 16.

Is Alex correct? Why, or why not?





Comparing decimals

Which is bigger, 7.95 or 7.85?

