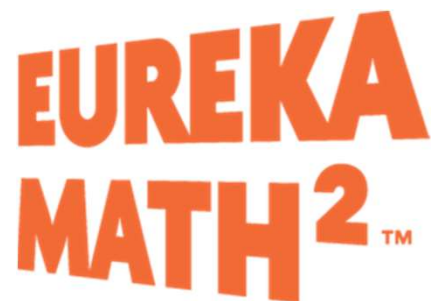




Module 4 - Lesson 3:

Represent decimal numbers to the thousandths place in different forms.

CCSS Standard – 5.NBT.A.1 / 5.NBT.A.3a

Reference Place Value Chart: LEARN book page 23

tens	ones	tenths	hundredths	thousandths

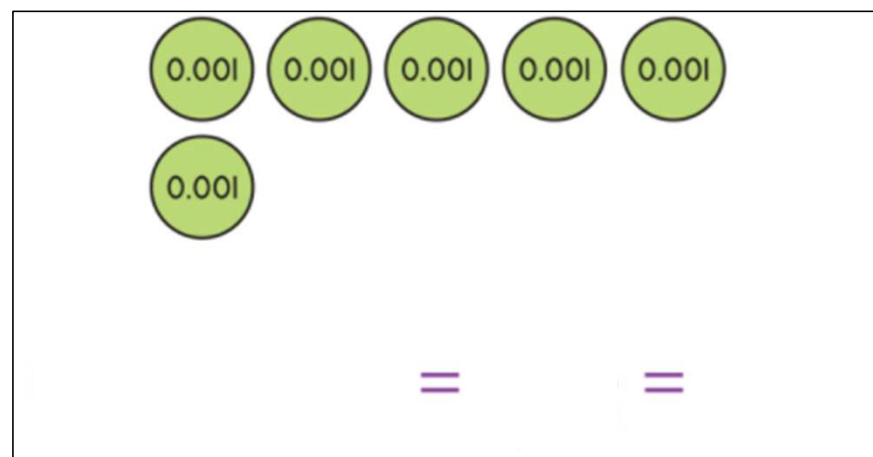
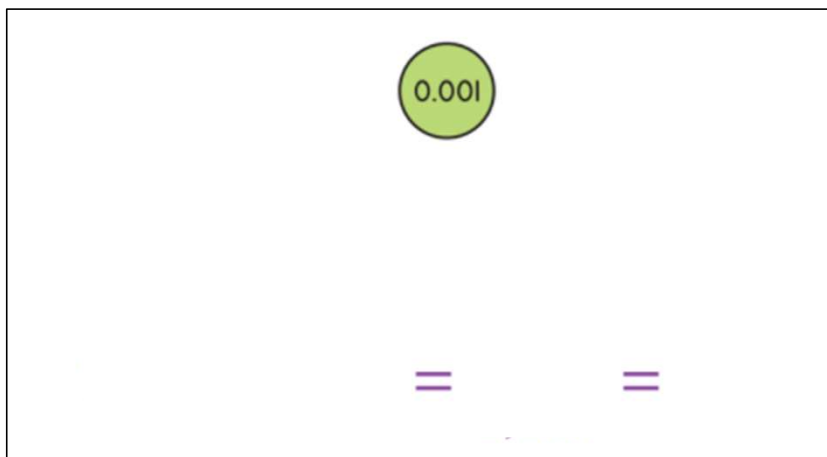
FLUENCY (10-min)

Whiteboard Exchange: Thousandths Written Three Ways



How do you represent the number shown in unit form?

Raise your hand when you know.



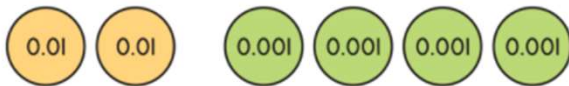
FLUENCY (10-min)

Whiteboard Exchange: Thousandths Written Three Ways



How do you represent the number shown in unit form?

Raise your hand when you know.



=



=

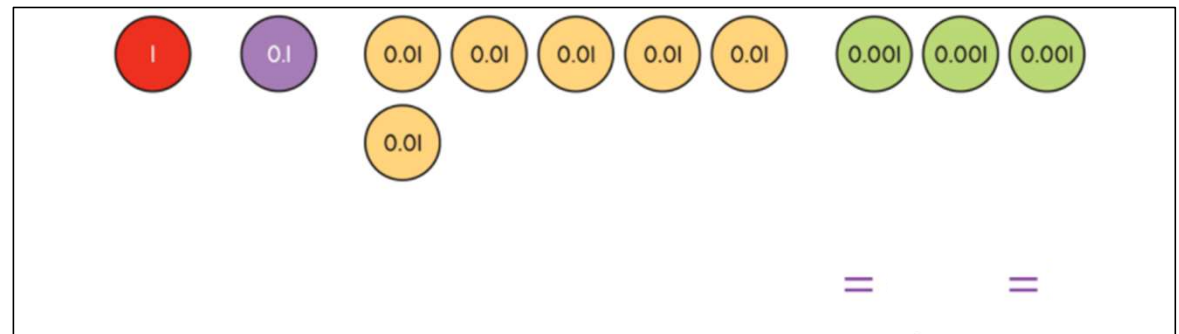
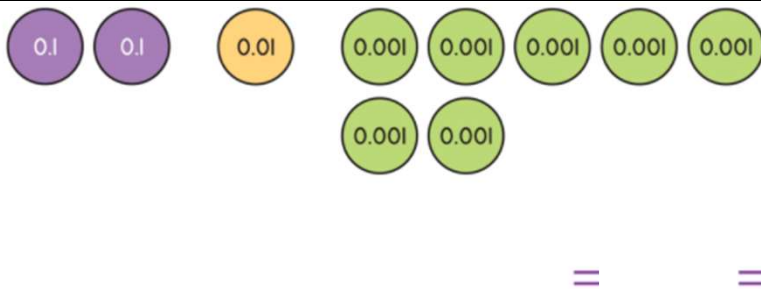
FLUENCY (10-min)

Whiteboard Exchange: Thousandths Written Three Ways



How do you represent the number shown in unit form?

Raise your hand when you know.



FLUENCY (10-min)

Whiteboard Exchange: Multiply by Powers of 10



What is 10^2 in standard form?
Raise your hand when you know.

$$10^2 = 100$$

Rewrite the expressions below with the power of 10 in standard form to find the product:

$$3 \times 10^2$$

=

$$57 \times 10^3$$

=

$$7 \times 10^6$$

=

$$91 \times 10^5$$

=

$$608 \times 10^4$$

=

LAUNCH (10-min)

Students represent a decimal number in various forms.

Read the following decimal:

6.789

With a partner, represent this decimal in various ways:

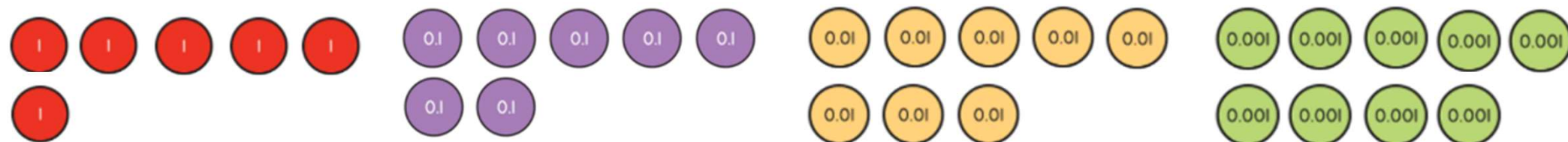
- Using place value disks
- Using your place value chart
- Unit form
- Fraction form
- Word form

6 ones 7 tenths 8 hundredths 9 thousandths

$6 \frac{789}{1,000}$

Six AND seven hundred eighty-nine thousandths

tens	ones	tenths	hundredths	thousandths
	6	7	8	9



LEARN (30-min)

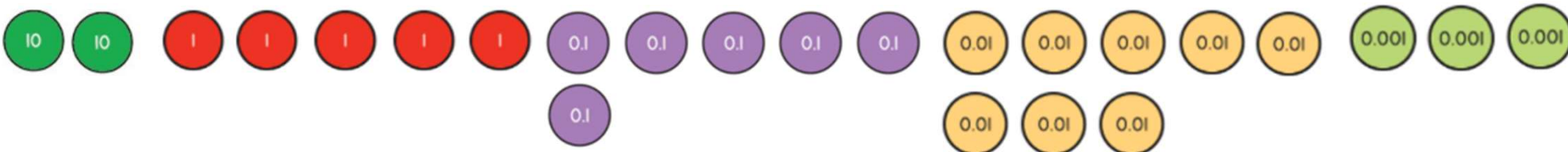
Value of Digits in Decimal Numbers

2 tens 5 ones 6 tenths 8 hundredths 3 thousandths

With a partner, represent the unit form of the decimal above in various ways:

- Using place value disks
- Using your place value chart
- Decimal form
- Fraction form
- Word form

tens	ones	tenths	hundredths	thousandths
2	5	6	8	3
20	5	0.6 6/10	0.08 8/100	0.003 3/1,000



LEARN (30-min)

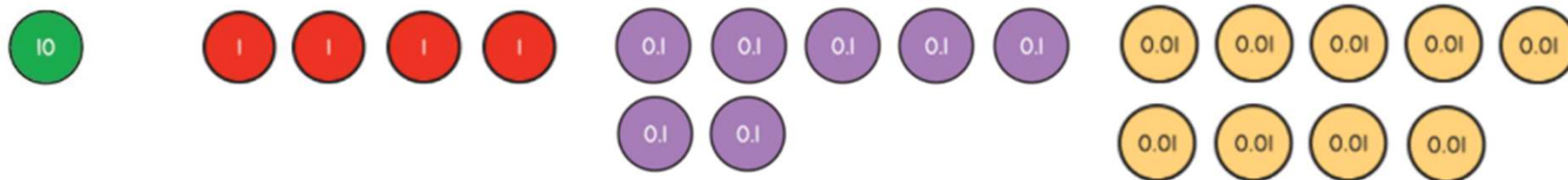
Value of Digits in Decimal Numbers

Fourteen and seven hundred ninety thousandths

With a partner, represent the word form of the decimal above in various ways:

- Using place value disks
- Using your place value chart
- Decimal form
- Fraction form
- Unit form

tens	ones	tenths	hundredths	thousandths
1	4	7	9	0
Does the value of the number change at all with a 0 in the thousandths place?				



LEARN (30-min)

Expanded Form for Decimal Numbers

Show the number forty-two and eight hundred fifty-three thousandths on your place value chart:

How do you see the value of each digit represented in the different forms?

tens	ones	tenths	hundredths	thousandths
4	2	8	5	3

$40 + 2 + 0.8 + 0.05 + 0.003$ decimal form

$40 + 2 + \frac{8}{10} + \frac{5}{100} + \frac{3}{1,000}$ fraction form

$4 \times 10 + 2 \times 1 + 8 \times 0.1 + 5 \times 0.01 + 3 \times 0.001$ decimal form

$4 \times 10 + 2 \times 1 + 8 \times \frac{1}{10} + 5 \times \frac{1}{100} + 3 \times \frac{1}{1,000}$ fraction form

LEARN (30-min)**Expanded Form for Decimal Numbers**

LEARN book page 25.

Using the same format, write **85.509** in the different expanded-form ways.

$$40 + 2 + 0.8 + 0.05 + 0.003$$

$$40 + 2 + \frac{8}{10} + \frac{5}{100} + \frac{3}{1,000}$$

$$4 \times 10 + 2 \times 1 + 8 \times 0.1 + 5 \times 0.01 + 3 \times 0.001$$

$$4 \times 10 + 2 \times 1 + 8 \times \frac{1}{10} + 5 \times \frac{1}{100} + 3 \times \frac{1}{1,000}$$

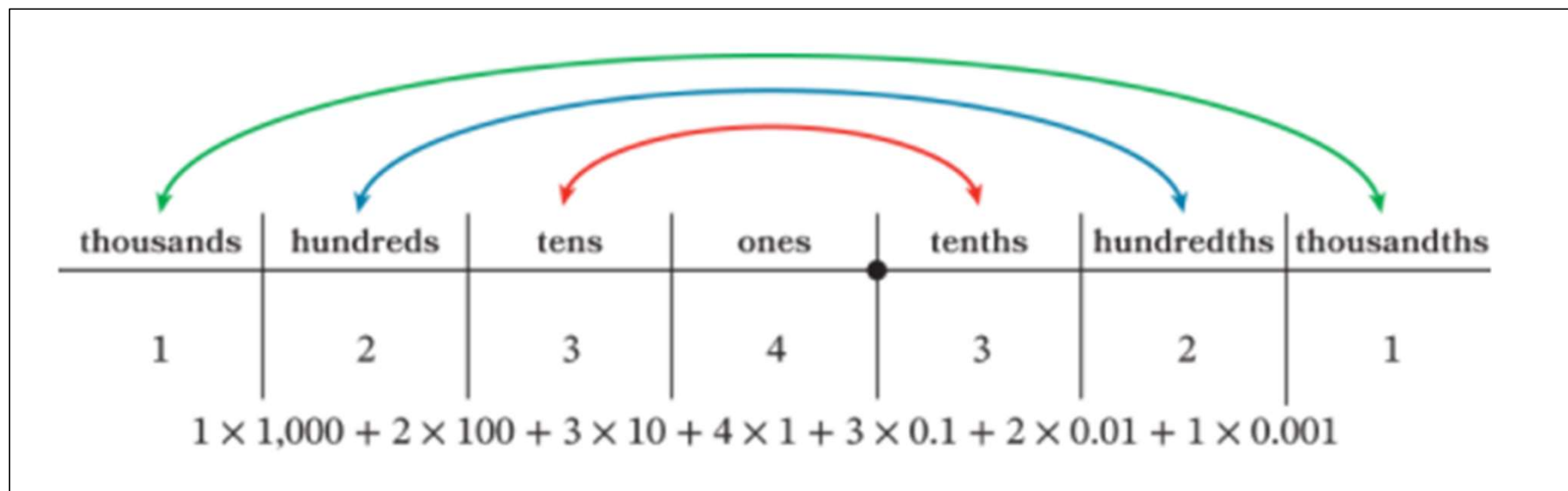
$$80 + 5 + 0.5 + 0.009$$

$$80 + 5 + 5/10 + 9/1,000$$

$$8 \times 10 + 5 \times 1 + 5 \times 0.1 + 9 \times 0.001$$

$$8 \times 10 + 5 \times 1 + 5 \times 1/10 + 9 \times 1/1,000$$

LAND (10-min)



Notice:

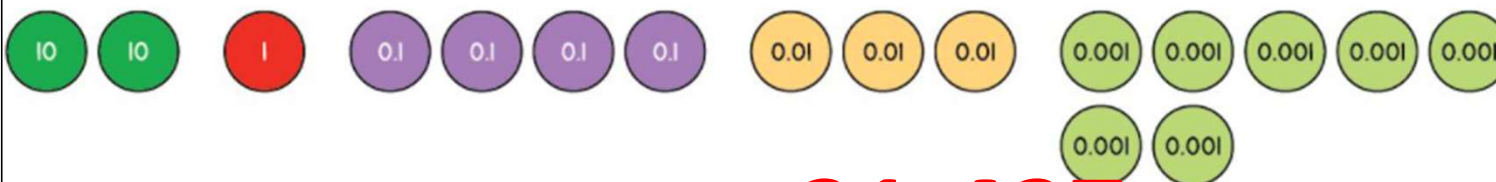
- The headings to the right of the decimals are all “ths”
- Know the value and heading of each place.
- Using a place value chart may help you write numbers out in expanded form easily.

LAND (10-min)

LEARN book page 27.

Fill in the correct numbers.

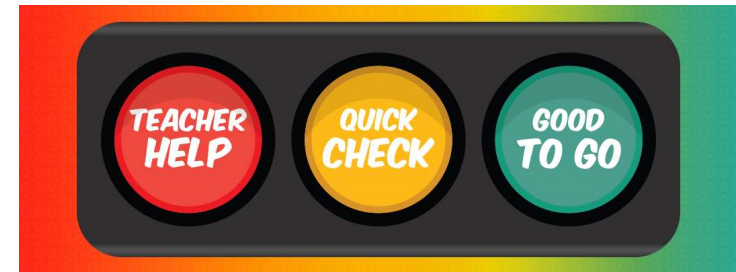
1. Use the place value disks shown to complete parts (a)–(f).



- a. The place value disks represent the number 21.437.
- b. The digit 2 is in the tens place. It has a value of 20.
- c. The digit 1 is in the ones place. It has a value of 1.
- d. The digit 4 is in the tenths place. It has a value of 0.4.
- e. The digit 3 is in the hundredths place. It has a value of 0.03.
- f. The digit 7 is in the thousandths place. It has a value of 0.007.

LAND (10-min)

Exit Ticket



Name

Date



3

Represent 1.809 in expanded form in two ways.

Exit Ticket – PAGE 31

Small Group Time:

Problem Set Pages 27 - 29

Homework:

Page 21 APPLY BOOK