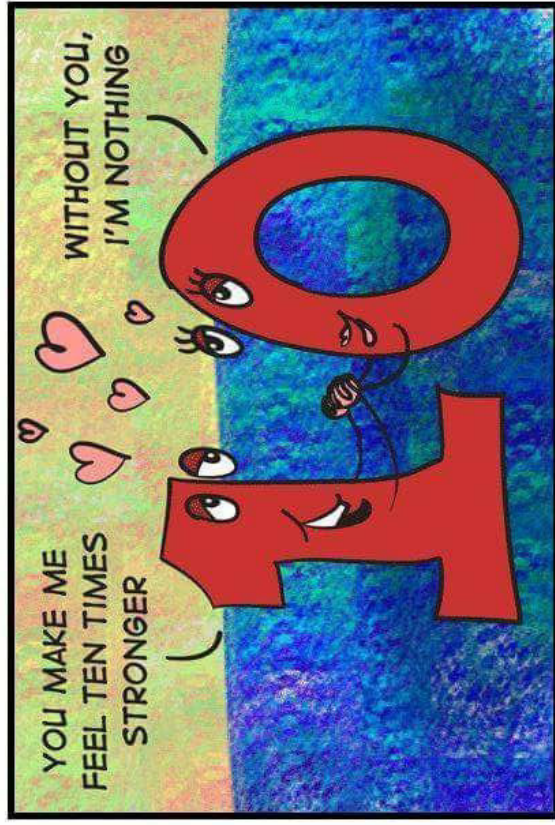


5th Topic 1





Group Expectations

- Only 1 marker & 1 eraser per group
- Write the current problem you are working on at the top
 - ALWAYS estimate your answer FIRST when doing operations
- Try not to erase - reorganize as needed
 - Remember “WRONG” thinking can lead to RIGHT
- You can ONLY write someone else’s thinking - NOT your own
 - Make sure everyone has a turn with the marker & turn to think
- EVERYONE must understand so that ANYONE can explain
 - Your goal is NOT to do it the fastest!! Goal is UNDERSTANDING!!
- You may look around the room but you must stay with your group



1) A store sells AA batteries. There are 10 batteries in a package. How many batteries are in 10 packages? 100 packages? How can you prove your thinking visually?

2) You can write 1000 using 10 as a factor like this... $1000 = 10 \times 10 \times 10 = 10^3$
Then solve these problems...

$10^1 = ?$

$10^2 = ?$

$10^4 = ?$

$10^5 = ?$

$10^6 = ?$

3) What pattern do you notice?

4) You thought that 10^5 was 50. Why might you have thought that and what mistake might you have made? What is the correct answer?

5) Write $10 \times 10 \times 10 \times 10 \times 10 \times 10 \times 10$ using exponents

6) Look at the pattern you noticed in #2 and #3 above. What do you think this equals? And why?

$10^0 = ?$



1) Remind your partners what each of these equal...

$$10^1 = ? \quad 10^2 = ? \quad 10^3 = ? \quad 10^4 = ? \quad 10^5 = ?$$

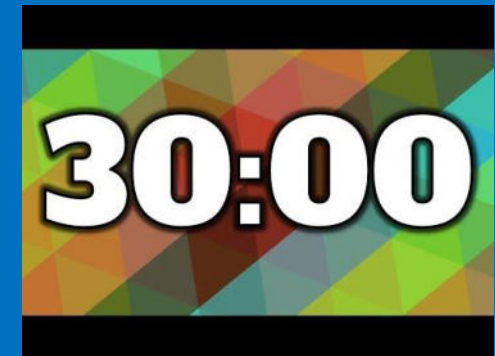
2) If you can write $5 \times 10^2 = 500$ and $5 \times 10^3 = 5000$ AND

then solve

$$7 \times 10^1 = ? \quad 7 \times 10^2 = ? \quad 7 \times 10^3 = ? \quad 7 \times 10^4 = ?$$

3) $8 \times 10^4 = ?$ 4) $4 \times 1000 = ?$ 5) $5 \times 10^5 = ?$

6) $6 \times 10,000 = ?$ 7) $4 \times 10^1 = ?$ 8) $8 \times 10^5 = ?$



Lesson 1-1

[Answer Key](#)



MATH | I can write numbers using exponents.

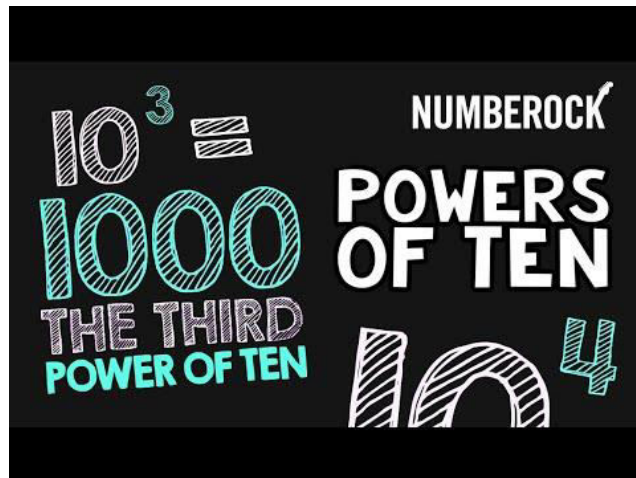
Check Your Understanding Pages 9 & 10

Mild # 6, 9, 12, 14

Medium #15, 16, 18

Spicy #18, 21, 22, 23

Extension: Scientific Notation Toss Game



[Powers of 10 and Exponents Song | a 5th Grade Math Video](#)

Exit Slip

- 1) Write down the value of each of the digits in 1,845,129.
- 2) Now write those values in the form of an addition problem.
- 3) You have just taken the standard form of this number and written it in expanded form. Now try to write each of those values as a multiplication problem using your powers of ten.
 - 1) But now we know how to write those powers of ten with exponents. See if you can write this number using exponents.
 - 2) Finally, write the number name. Spell out EVERYTHING except the commas (but don't forget them!)

6) $8,000,000 + 300 + 9 = ?$

7) $(4 \times 10^4) + (6 \times 10^2) = ?$

8) $10,000 + 20 + 3$

Write each of these in expanded form. Challenge your group to use exponents.

9) 5360

10) 102,200

11) 85,000,011

Write the value of the given digits. What is the relationship of those digits to each other?

12) The 7's in...6778

13) The 9's in...990,250

14) The 1's in... 2,111,168

15) The 4's in... 4004

16) The 3's in... 3,652,030



Lesson 1-2

[Answer Key](#)



MATH | I can understand place-value relationships.

Check Your Understanding Pages 15 & 16

Mild # 2 - 5

Medium #1, 6, 7, 8, 11

Spicy #9, 10, 13, 14

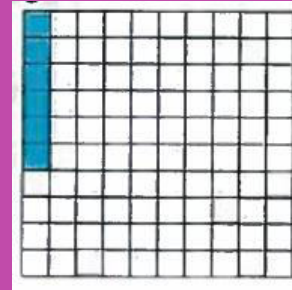
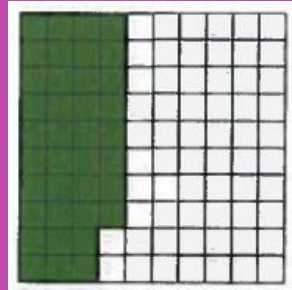
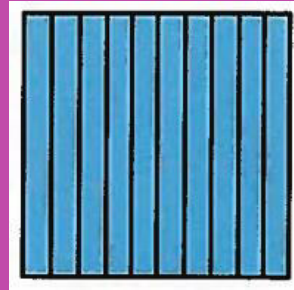
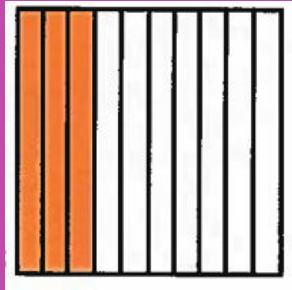
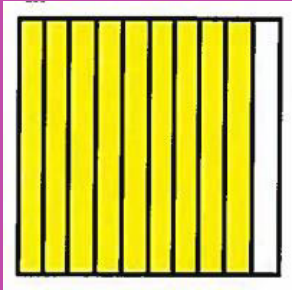
[Place Value Chart](#)

Extension: Toss & Talk 1-2



Exit Slip

1) Write the decimal & fraction represented by the model:



2) Write these decimals as a fraction:

0.512

0.309

0.001

0.05

3) Write these fractions as a decimal: $\frac{2}{1000}$

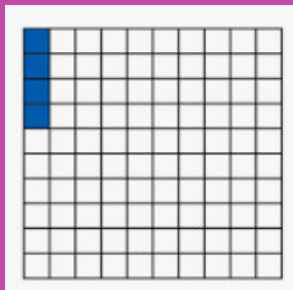
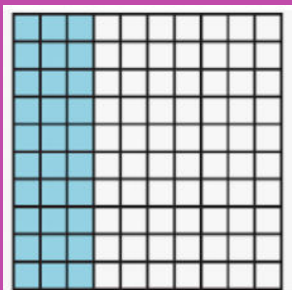
$\frac{34}{100}$

$\frac{508}{1000}$

$\frac{99}{1000}$

4) You said that $97/1000$ can be written as 0.97. Is that correct? Explain why or why not.

Compare the values of 0.3 & 0.03. Notice the base ten blocks colored below. The value of 0.3 is 10 times greater than the value of 0.03. Or we could say 0.03 is 1/10 as great as 0.3.



Now tell...

5) 0.04 is 10 times greater than _____

6) 0.009 is 1/10 of _____

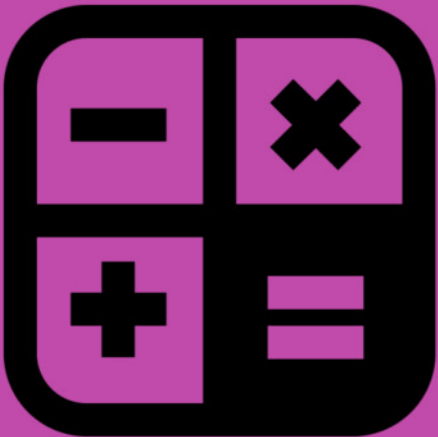
7) 0.7 is 10 times greater than _____

8) 0.01 is 1/10 of _____



Lesson 1-3

[Answer Key](#)



MATH | I can read & write decimals to the thousandths.

Check Your Understanding Pages 21 & 22

Mild # 5 - 8, 13 - 16

Medium #1, 2, 23, 25

Spicy #26, 29, 30

Extension: Toss & Talk 1-3



Exit Slip

Change the number name to standard form:

- 1) Four and sixty-eight thousandths
- 2) Nine and twenty hundredths

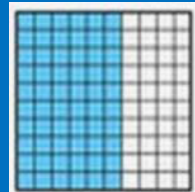
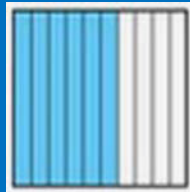
Change the expanded form to standard form:

3) $(4 \times 100) + (7 \times 10) + (6 \times 1) + \left(6 \times \frac{1}{10}\right) + \left(3 \times \frac{1}{100}\right) + \left(7 \times \frac{1}{1000}\right)$

4) $(4 \times 1) + \left(6 \times \frac{1}{1000}\right)$

5) $(3 \times 1) + \left(3 \times \frac{1}{10}\right) + \left(9 \times \frac{1}{1000}\right)$

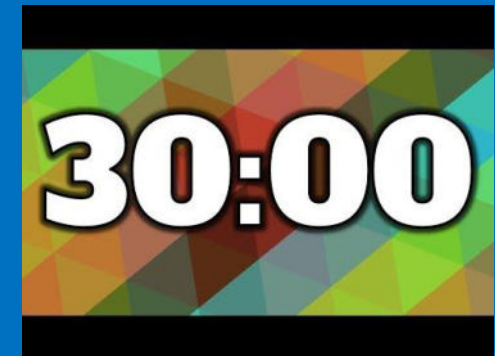
Equivalent decimals name the same amount. Look at the models below and tell your partners how 0.6 is the same as 0.60.



So name two equivalent decimals to...

- 6) 2.200
- 7) 8.1

8) Write the number 734.291 using the number name & expanded form.



Lesson 1-4

[Answer Key](#)



MATH | I can read & write decimals in different ways.

Check Your Understanding Pages 27 & 28

Mild #6 - 9, 10

Medium #2, 3 -5, 11, 12

Spicy #13, 14, 16

Extension: Anything games from this topic so far

Exit Slip

form

A white notepad icon with a yellow top section and a white bottom section. The word "Quiz" is written in black on the white section.

Quiz

MATH | I can review and show what I know from lessons 1-1 through 1-4.

[Review Slides](#)

[Quiz](#)

[Google Form Quiz](#)

[RETAKE Topic 1 Quiz](#)



- 1) The lengths of three ants were measured in a lab. They were 0.521 centimeters, 0.498 centimeters, and 0.550 centimeters. Put them in order from longest to shortest.
- 2) You said that 12.68 is greater than 12.8 because 68 is greater than 8. Are you correct? Explain.
- 3) You then claimed that 3.44 centimeters is shorter than 3.432 centimeters because 3.44 has fewer digits. Are you correct? Explain.
- 4) Next you tried to convince your partners that 3.5 was greater than 3.05 because there is a 5 in the tenths place which is bigger than a 5 hundredths. Are you correct? Explain.

Determine $>$, $<$, or $=$

5) 3.692 ____ 3.697

6) 7.216 ____ 7.203

7) 0.890 ____ 0.89

8) 9.707 ____ 9.717

Put these in order from least to greatest...

9) 5.540 5.631 5.625

10) 0.675

1.529

1.35

0.693

Draw a model or use a number line to prove...

11) Which is bigger, 0.3 or 0.03?

12) Which is bigger, 0.4 or 0.07?

13) What order do these go in: 0.1 or 0.2 or 0.13 or 0.12 or 0.126?



Lesson 1-5

[Answer Key](#)



MATH | I can compare decimals to the thousandths.

Check Your Understanding Pages 33 & 34

Mild #3 - 8

Medium #9 - 12

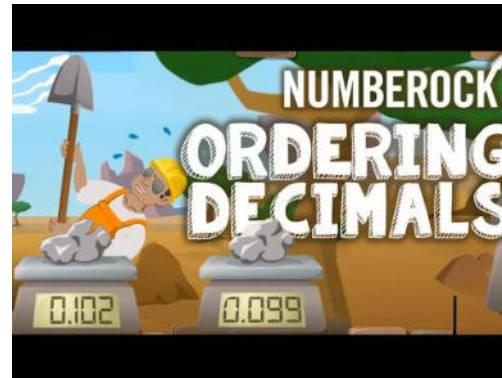
Spicy #1 - 2, 17 - 19

Extension: Number Top-it Game



[Comparing Decimals | Less Than and Greater Than Decimals | Grades 4-6](#)

[Ordering Decimals Song | Comparing Decimals | 5th Grade & Up](#)



Exit Slip



Write 3 numbers between the following:

1) \$5 & \$6

2) 4 centimeters & 5 centimeters

3)

21 seconds & 22 seconds

4) 2.15 meters & 2.16 meters

5) 0.8 grams & 0.9 grams

Round these decimals to the nearest **WHOLE NUMBER**.

6) 4.5

7) 57.3

8) 34.731

9) 215.39

Round these decimals to the nearest **TENTH**.

10) 7.158

11) 84.732

Round these decimals to the nearest **HUNDREDTH**.

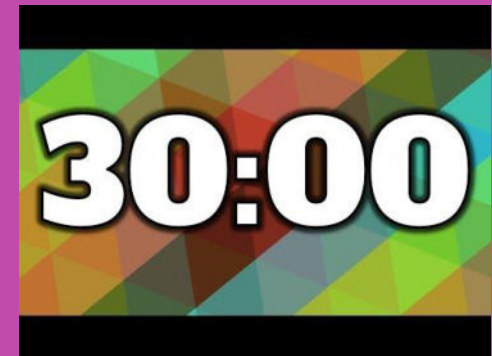
12) 0.758

13) 6.4382

14) A decimal number has been rounded to 6. What might the number have been? Tell three options.

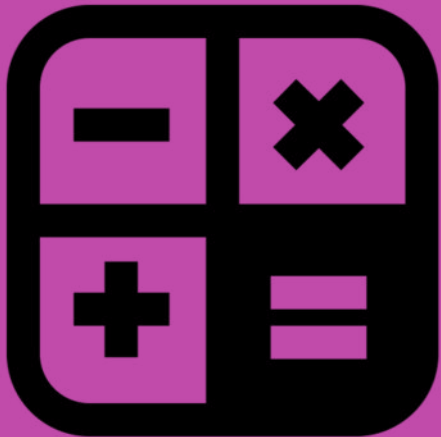
15) Name two numbers that might be rounded to 5.8.

16) Name two numbers that might be rounded to 8.21.



Lesson 1-6

[Answer Key](#)



MATH | I can round decimals to different places.

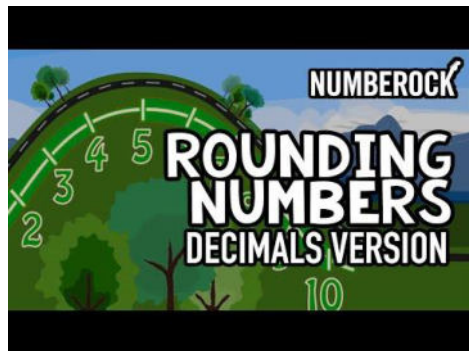
Check Your Understanding Pages 39 & 40

Mild #2 - 5

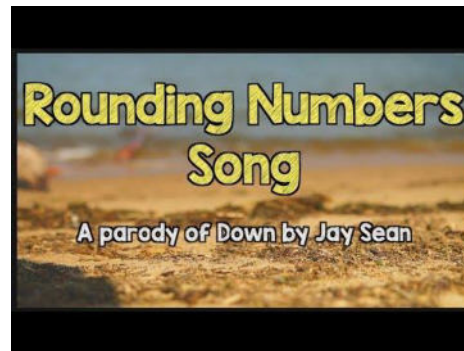
Medium #1, 10 - 13, 14

Spicy #15, 16, 19, 20, 21

Extension: Rounding Bingo Games



[Rounding Decimals Song | Rounding Decimals Rap Music Video](#)



Exit Slip

Fill in the missing number in each of these. Explain what patterns you noticed and how that helped you.

1)

0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.1
0.11				0.15	0.16			0.19	
0.21								0.29	
0.31	0.32		0.34			0.37			

2)

0.55	
	0.66
0.75	
	0.86
0.95	

0.32	
0.52	
0.72	

3)

0.001	0.002		0.004	0.005	0.006				0.01
0.011		0.013			0.016	0.017		0.019	0.02
	0.022					0.027		0.029	
0.031	0.032		0.034	0.035		0.037			

4)

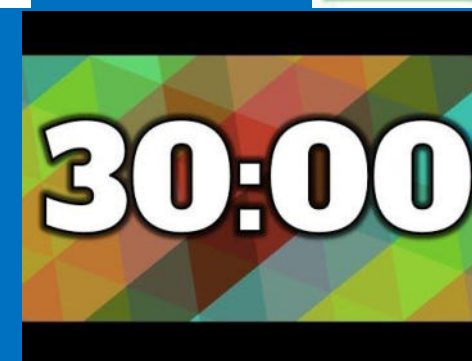
0.056
0.086

Continue the pattern for the next three numbers...

5) 10.75, 10.65, 10.55, ____, ____, ____

6) 0.2, 0.22, 0.24, 0.26, ____, ____, ____

7) 0.07, 0.08, 0.09, ____, ____, ____



Lesson 1-7

[Answer Key](#)



MATH | I can look for and use structure of our decimals place value system to solve problems.

Check Your Understanding Pages 45 & 46

Mild #1, 2

Medium #3, 4, 5

Spicy #6, 7

Extension: Display the Digits 1-7



Review

MATH | I can do my best to review for the test.

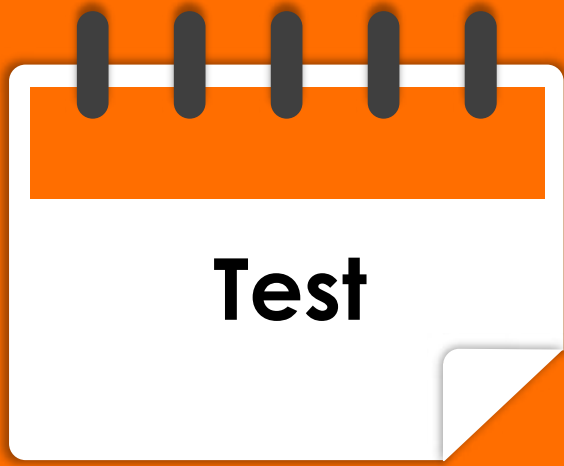
Lesson - Review for Test

MJ p. 48 Vocabulary Review

MJ p. 51 ALL

MJ p. 52 ALL





MATH | I can do my best on my test & double check my work before submitting.

Test

