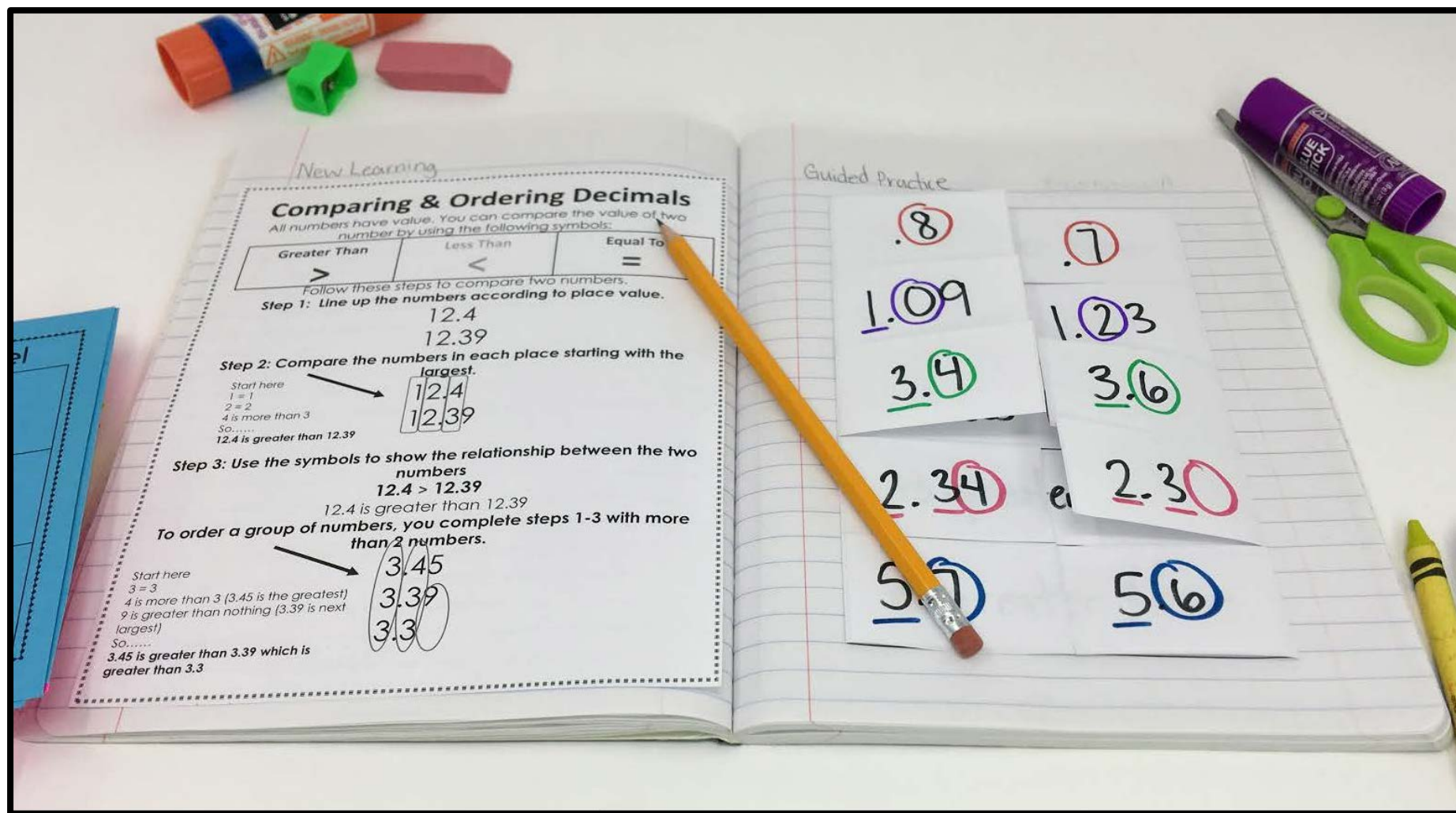


Decimals Interactive Math Notebook

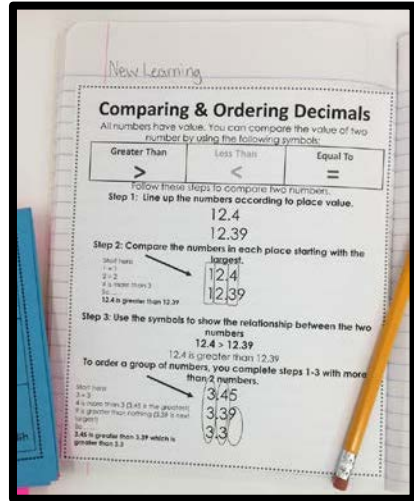


Activities to
TEACH, REINFORCE and **ASSESS**
each skill

What's Included?

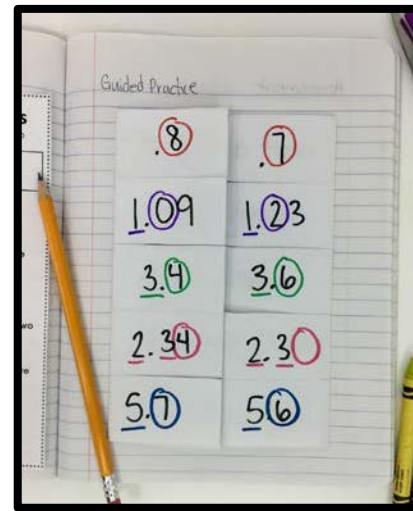
Each skill has these four elements:

Anchor Chart



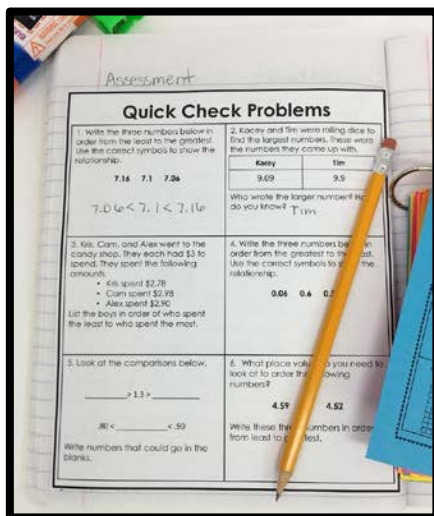
Great tool to introduce new math skill to students. Student friendly and fits perfectly in journals.

Interactive Foldable



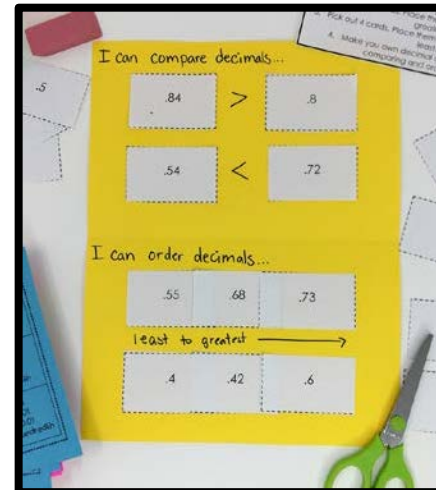
Works great as guided practice and gives students an interactive opportunity to practice the new skill.

Exit Ticket



Great way to assess students at the end of the lesson or to use as a spiral review a few weeks after the lesson is taught.

Extension Activity



Works great as early finisher work or in a math work station.

What Skills are Covered?

Decimals

Whole numbers can be broken down into parts. You can write part of a number using decimals.

	This is 1 whole square. We can represent this model in several ways. one whole 1.0 1
	This is the square split into 10 equal sections. We can represent this model in several ways. one tenth 0.1 $\frac{1}{10}$
	This is the square split into 100 equal sections. We can represent this model in several ways. one hundredth 0.01 $\frac{1}{100}$

Decimals

Representing Decimals

Just like whole numbers, you can represent decimals in different ways.

Standard Form writing the number using only digits 2.35	Word Form Writing the number using only words two and thirty five hundredths
Expanded Notation Expanding the number to show the value of each digit. $2 \times 1 + 3 \times .1 + 5 \times .01$	Expanded Form Expanding the number to add the value of each digit $2 + .3 + .05$

Practice:

Standard Form _____
Expanded Form _____
Expanded Notation _____
Word Form _____

Representing Decimals

Comparing & Ordering Decimals

All numbers have value. You can compare the value of two numbers by using the following symbols:

Greater Than >	Less Than <	Equal To =
--------------------------	-----------------------	----------------------

Follow these steps to compare two numbers.

Step 1: Line up the numbers according to place value.

12.4
12.39

Step 2: Compare the numbers in each place starting with the largest.

Start here
1 = 1
2 = 2
4 is more than 3
So.....
12.4 is greater than 12.39

Step 3: Use the symbols to show the relationship between the two numbers

12.4 > 12.39

To order a group of numbers, you complete steps 1-3 with more than 2 numbers.

Start here
3 = 3
4 is more than 3 (3.45 is the greatest!)
9 is greater than nothing (3.39 is next largest!)
So.....
3.45 is greater than 3.39 which is greater than 3.3

Comparing Decimals

Relating Decimals to Fractions

Decimals and fractions both name a part of a whole.

Decimals can be written as fractions.
 $.3 = \frac{3}{10}$ and $.45 = \frac{45}{100}$

Fractions can be written as decimals.
 $\frac{6}{10} = .6$ and $\frac{18}{100} = .18$

Decimals	Fractions
.2	$\frac{2}{10}$
.25	$\frac{25}{100}$
.6	$\frac{6}{10}$
.68	$\frac{68}{100}$

Decimals to Fractions

Decimals on a Number Line

You can show the order of numbers by using a number line.

This number line shows the whole numbers 1 – 11
In between each whole number is ten tenths.

5.0 5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8 5.9 6.0

If you expand the section between 5 and 6 you can see that there are ten sections. These are tenths.
In between each tenth is ten hundredths.

5.50 5.51 5.52 5.53 5.54 5.55 5.56 5.57 5.58 5.59 5.60

If you expand the section between 5.5 and 5.6 you can see that there are ten sections. These are hundredths.

Decimals on a Number Line



Additional Features

- Includes **assembly notes** and **directions** for each entry
- Includes **answer key** for each exit ticket
- Includes **black and white** or **color options** for each anchor chart

Comparing & Ordering Decimals – Assembly Notes & Directions

Anchor Chart
Make enough copies for students. Have students cut and paste in their math journal. Review anchor chart with students as you would a full size anchor chart. Students will be able to reference back to this page if they have questions about place value.

Foldable
See the example provided in the pictures to the right. Create foldable with students. You can modify the examples to meet your students specific learning needs.

Foldable - Outside

Foldable - Inside

Credited by Two Teachers with Style © 2015

Quick Check Problems - KEY

1. Write the three numbers below in order from the least to the greatest. Use the correct symbols to show the relationship.
7.16 7.1 7.06
7.06 < 7.1 < 7.16

Kacey	Tim
9.09	9.9

Who wrote the larger number? How do you know?
Tim, because the digit in the tenths place is larger than Kacey's

3. Kris, Cam, and Alex went to the candy shop. They each had \$3 to spend. They spent the following amounts.
• Kris spent \$2.78
• Cam spent \$2.98
• Alex spent \$2.90
List the boys in order of who spent the least to who spent the most.
Cam, Alex, Kris

4. Write the three numbers below in order from the greatest to the least. Use the correct symbols to show the relationship.
0.06 0.6 0.36
0.6 > 0.36 > 0.06

5. Look at the comparisons below. **Answers will vary.**
> 1.3 > _____
.80 < _____ < .90
Write numbers that could go in the blanks.

6. What place value do you need to look at to order the following numbers? **hundredths**
4.59 4.5 4.52
Write these three numbers in order from least to greatest.
4.5 < 4.52 < 4.59

Comparing and Ordering Decimals – Quick Check Key

Comparing & Ordering Decimals
All numbers have value. You can compare the value of two numbers by using the following symbols:

Greater Than >	Less Than <	Equal To =
--------------------------	-----------------------	----------------------

Follow these steps to compare two numbers.
Step 1: Line up the numbers according to place value.

Step 2: Compare the numbers in each place starting with the largest.

Start here
1 = 1
2 = 2
4 is more than 3
So.....
12.4 is greater than 12.39

Step 3: Use the symbols to show the relationship between the two numbers
12.4 > 12.39
12.4 is greater than 12.39
To order a group of numbers, you complete steps 1-3 with more than 2 numbers.

Start here
3 = 3
4 is more than 3 (3.45 is the greatest)
9 is greater than nothing (3.39 is next largest)
So.....
3.45 is greater than 3.39 which is greater than 3.3

Comparing & Ordering Decimals
All numbers have value. You can compare the value of two numbers by using the following symbols:

Greater Than >	Less Than <	Equal To =
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Follow these steps to compare two numbers.
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Step 2: Compare the numbers in each place starting with the largest.

Start here
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2 = 2
4 is more than 3
So.....
12.4 is greater than 12.39

Step 3: Use the symbols to show the relationship between the two numbers
12.4 > 12.39
12.4 is greater than 12.39
To order a group of numbers, you complete steps 1-3 with more than 2 numbers.

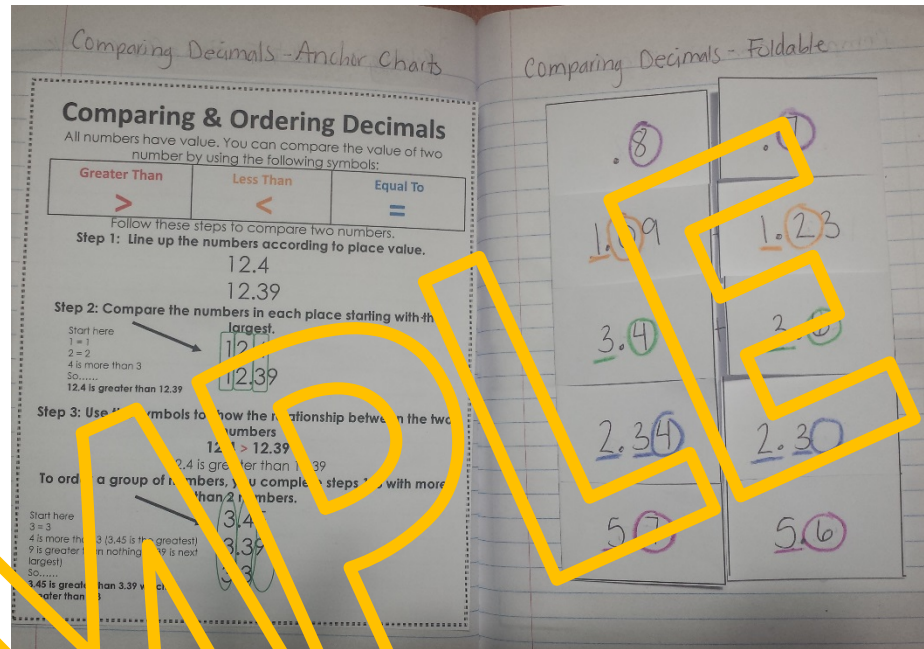
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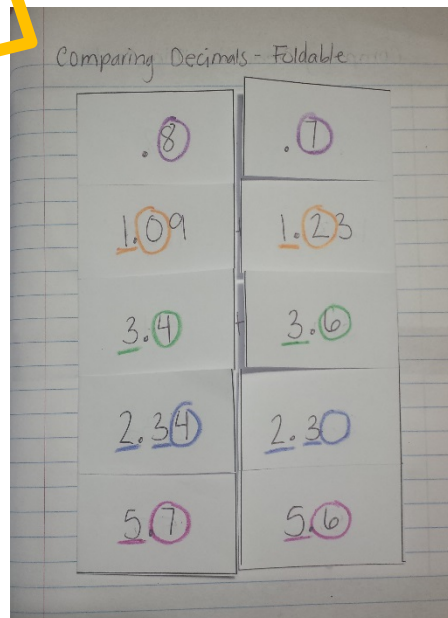
Comparing & Ordering Decimals – Assembly Notes & Directions

Anchor Chart

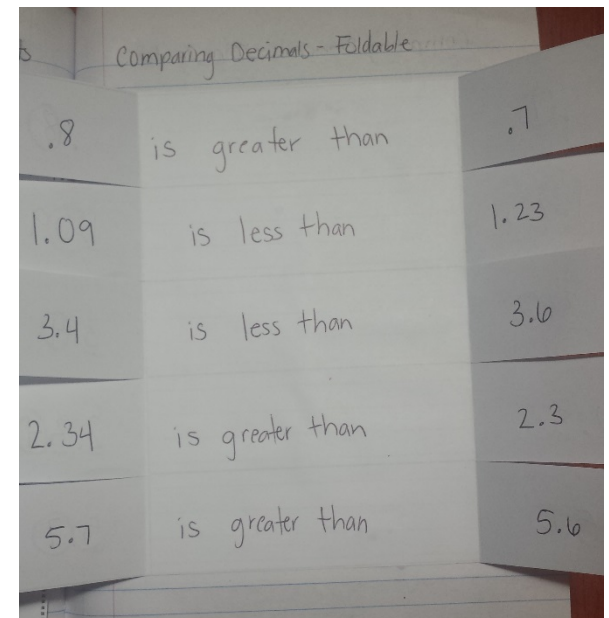
Make enough copies for students. Have students cut and paste in their math journal. Review anchor chart with students as you would a full size anchor chart. Students will be able to reference back to this page if they have questions about place value.



Foldable - Outside



Foldable - Inside



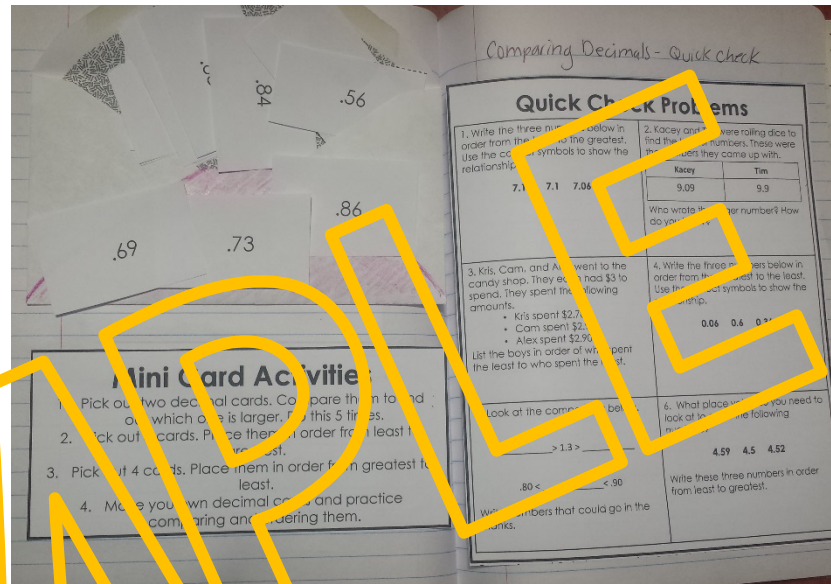
Foldable

See the example provided in the pictures to the right. Create foldable with students. You can modify the examples to meet your students specific learning needs.

Comparing and Ordering Decimals – Assembly Notes & Directions

Extension Activities

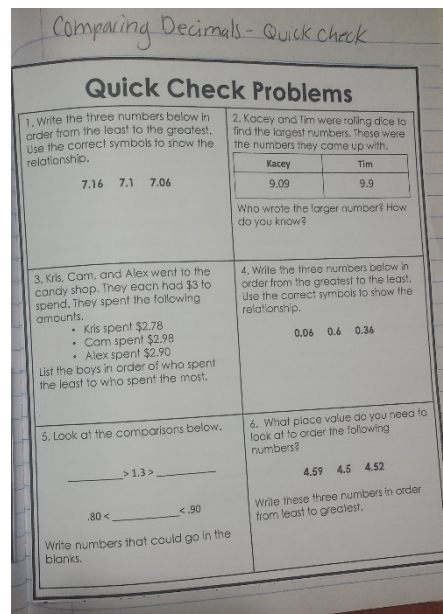
Give each student a copy of the Extension Activities list to place in their journal as well as a copy of the mini cards. Have students glue a small envelope into their math journal to store their mini cards. You can use the mini card activities as an extension or early finisher activity.



Quick Check

Give each student a copy of the Quick Check sheet. Students can glue them in their math journal as a reference page, or you can collect them. The quick check can be used as a formative assessment to see where your students level of mastery is after you have spent a few days practicing the skill.

Quick Check



Quick Check - Key

Quick Check Problems - KEY

1. Write the three numbers below in order from the least to the greatest. Use the correct symbols to show the relationship.

7.16 7.1 7.06

7.06 < 7.1 < 7.16

2. Kacey and Tim were rolling dice to find the largest numbers. These were the numbers they came up with.

Kacey	Tim
9.09	9.9

Who wrote the larger number? How do you know?
Tim, because the digit in the tenths place is larger than Kacey's

3. Kris, Cam, and Alex went to the candy shop. They each had \$3 to spend. They spent the following amounts.

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- Cam spent \$2.98
- Alex spent \$2.90

List the boys in order of who spent the least to who spent the most.
Cam, Alex, Kris

4. Write the three numbers below in order from the greatest to the least. Use the correct symbols to show the relationship.

0.06 0.6 0.36

0.6 > 0.36 > 0.06

5. Look at the comparisons below.

Answers will vary.

_____ > 1.3 > _____

.80 < _____ < .90

Write numbers that could go in the blanks.

6. What place value do you need to look at to order the following numbers? **tenths**

4.59 4.5 4.52

Write these three numbers in order from least to greatest.

4.5 < 4.52 < 4.59

Comparing & Ordering Decimals

All numbers have value. You can compare the value of two numbers by using the following symbols:

Greater Than $>$	Less Than $<$	Equal To $=$
----------------------------	-------------------------	------------------------

Follow these steps to compare two numbers.

Step 1: Line up the numbers according to place value.

12.4
12.39

Step 2: Compare the numbers in each place starting with the largest.

Start here

1 = 1

2 = 2

4 is more than 3

So.....

12.4 is greater than 12.39

12.4
12.39

Step 3: Use the symbols to show the relationship between the two numbers

$12.4 > 12.39$

12.4 is greater than 12.39

To order a group of numbers, you complete steps 1-3 with more than 2 numbers.

Start here

3 = 3

4 is more than 3 (3.45 is the greatest)

9 is greater than nothing (3.39 is next largest)

So.....

3.45 is greater than 3.39 which is greater than 3.3

3.45
3.39
3.3

Comparing & Ordering Decimals

All numbers have value. You can compare the value of two numbers by using the following symbols:

Greater Than	Less Than	Equal To
$>$	$<$	$=$

Follow these steps to compare two numbers.

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12.4
12.39

Step 2: Compare the numbers in each place starting with the largest.

Start here

1 = 1

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4 is more than 3

So.....

12.4 is greater than 12.39

12.4
12.39

Step 3: Use the symbols to show the relationship between the two numbers

$12.4 > 12.39$

12.4 is greater than 12.39

To order a group of numbers, you complete steps 1-3 with more than 2 numbers.

Start here

3 = 3

4 is more than 3 (3.45 is the greatest)

9 is greater than nothing (3.39 is next largest)

So.....

3.45 is greater than 3.39 which is greater than 3.3

3.45
3.39
3.3

SAMPLE

Extension Activities

1. Pick out two decimal cards. Compare them to find out which one is larger. Do this 5 times.
2. Pick out 3 cards. Place them in order from least to greatest.
3. Pick out 4 cards. Place them in order from greatest to least.
4. Make your own decimal cards and practice comparing and ordering them.

Extension Activities

1. Pick out two decimal cards. Compare them to find out which one is larger. Do this 5 times.
2. Pick out 3 cards. Place them in order from least to greatest.
3. Pick out 4 cards. Place them in order from greatest to least.
4. Make your own decimal cards and practice comparing and ordering them.

SAMPLE

.4

.41

.42

.43

.5

.54

.55

.56

.6

.67

.68

.69

.7

.71

.72

.73

.8

.84

.84

.86

SAMPLE

SAMPLE

Quick Check Problems

1. Write the three numbers below in order from the least to the greatest. Use the correct symbols to show the relationship.

7.16 7.1 7.06

2. Kacey and Tim were rolling dice to find the largest numbers. These were the numbers they came up with.

Kacey	Tim
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0.06 0.6 0.36

5. Look at the comparisons below.

_____ > 1.3 > _____

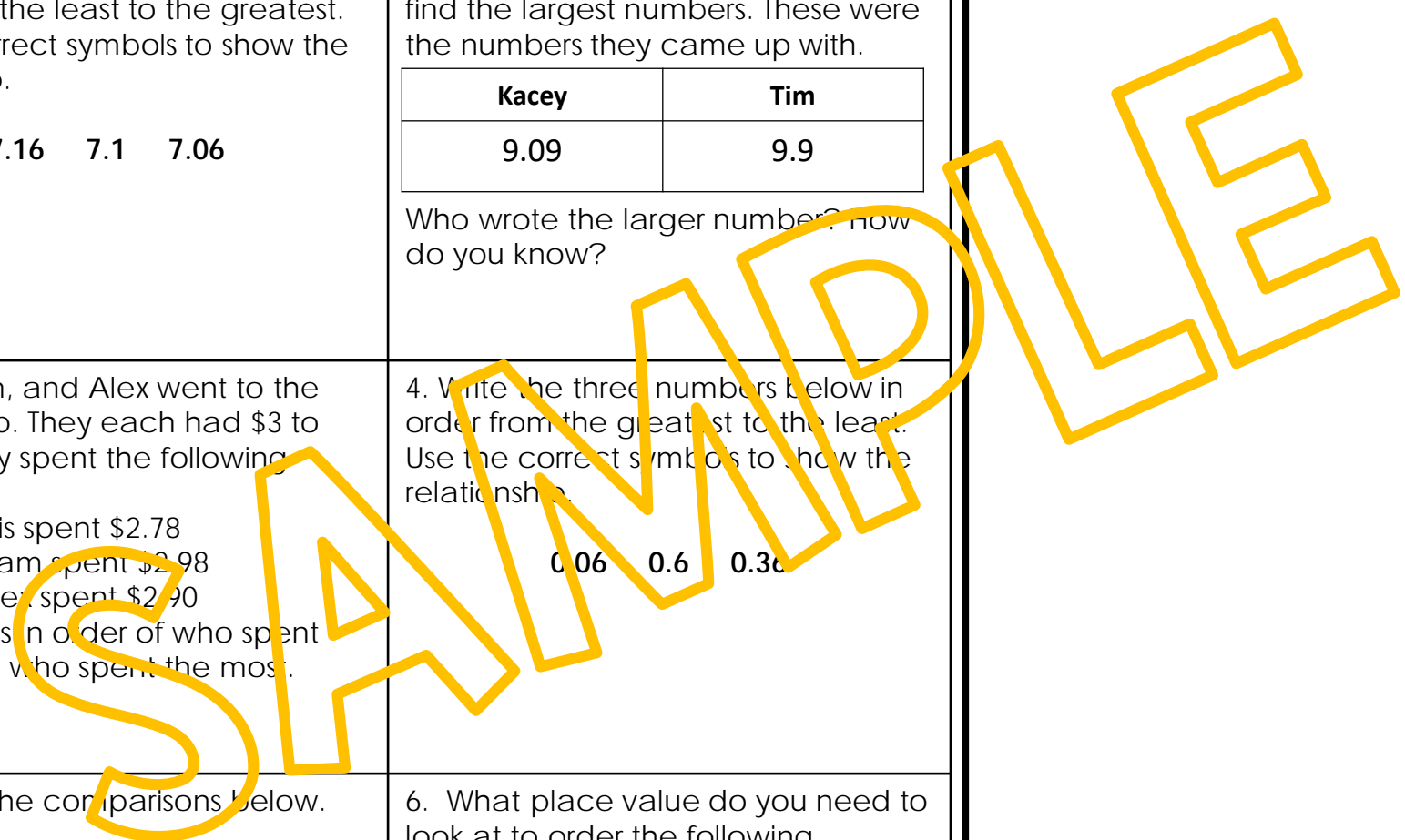
.80 < _____ < .90

Write numbers that could go in the blanks.

6. What place value do you need to look at to order the following numbers?

4.59 4.5 4.52

Write these three numbers in order from least to greatest.



Quick Check Problems - KEY

1. Write the three numbers below in order from the least to the greatest. Use the correct symbols to show the relationship.

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7.06 < 7.1 < 7.16

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.80 < _____ < .90

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Write these three numbers in order from least to greatest.

4.5 < 4.52 < 4.59

