

WHAT WE ARE LEARNING

Decimal Concepts

**VOCABULARY**

Here is a vocabulary word we use in class:

**Percent** “Per hundred” or the ratio of a number to 100. The symbol used to write a percent is %.

**Dear Family,**

Your child is studying place value with decimals; estimation of decimal sums, differences, products, and quotients; and changing decimals to percents and percents to decimals.

This is how your child is learning to use place value to express, compare, and order decimals.

O	T	H
6	3	7
6	3	
2	9	5
0	2	5
5	5	

To compare decimals, use place value.

Compare the digits from left to right.

**Which is greater, 6.37 or 6.3?**

Same number of ones digits. 6.37 6.3

Same number of tenths digits. 6.37 6.3

Add a zero.

Compare hundredths digits. 6.37 6.30

7 is greater than 0.

So,  $6.37 > 6.3$  and  $6.3 < 6.37$ .

Your child is learning to use the same methods to estimate sums, differences, products, and quotients of decimals as were used for estimating with whole numbers.

$3.69 + 3.79 + 4.07$       The three addends cluster around 4, so multiply 4 by 3.  
 $3 \times 4 = 12$   
 The sum is about 12.

$3.69 \times 3.79$       Round to the nearest one.  
 Then multiply.  $4 \times 4 = 16$   
 The product is about 16.

$23.4 \div 6.3$       Use compatible numbers. Then divide.  $24 \div 6 = 4$   
 The quotient is about 4.

This is one way your child is learning to write percents as decimals and decimals as percents.

*To write a percent as a decimal*

1. Express the percent as a fraction with 100 as the denominator.
2. Write the fraction as a decimal.

*To write a decimal as a percent*

1. Express the decimal as a fraction with 100 as the denominator.
2. Write the fraction as a percent.

Write 27% as a decimal.

First, write 27% as a fraction:  
 $\frac{27}{100}$ .

Then, write  $\frac{27}{100}$  as a decimal:  
0.27.

Write 0.71 as a percent.

First write 0.71 as a fraction:  
 $\frac{71}{100}$ .

Then write  $\frac{71}{100}$  as a percent:  
71%.

As you work with your child, talk about math to help build confidence and understanding.

**Sincerely,**

### Decimal Concepts

Write the value of the underlined digit.

1. 3.1092 \_\_\_\_\_      2. 0.0537 \_\_\_\_\_  
 3. 8.682 \_\_\_\_\_      4. 0.0251 \_\_\_\_\_

Write the number in expanded form.

5. 0.00301 \_\_\_\_\_  
 6. 9.128 \_\_\_\_\_  
 7. 11.0643 \_\_\_\_\_  
 8. 159.07 \_\_\_\_\_

Compare the numbers. Write  $<$ ,  $>$ , or  $=$ .

9. 8.09 ○ 8.094      10. 331.47 ○ 321.47      11. 7.26 ○ 7.263

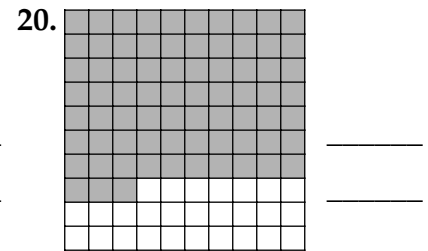
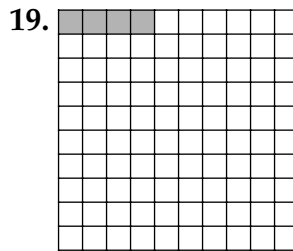
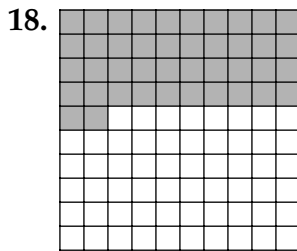
Write the numbers in order from least to greatest.

12. 36.79, 39.76, 39.67, 37.96 \_\_\_\_\_  
 13. 0.004, 0.040, 0.400, 0.044 \_\_\_\_\_

Estimate.

14.  $7.8 + 8.2 + 8.03$  \_\_\_\_\_      15.  $53.9 \times 5$  \_\_\_\_\_  
 16.  $258.8 - 37.9$  \_\_\_\_\_      17.  $55.21 \times 9.8788$  \_\_\_\_\_

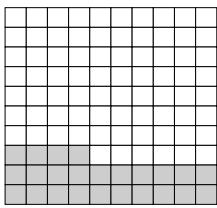
Write the decimal and percent for the shaded part.



Write the corresponding decimal or percent.

21. 90% \_\_\_\_\_      22. 0.47 \_\_\_\_\_      23. 7% \_\_\_\_\_      24. 0.08 \_\_\_\_\_

**Directions:** Cut out the cards below and place them face down in 4 rows and 4 columns. Take turns. Flip over two cards. If the cards match, take the cards. If the cards do not match, turn them face down. Whoever has the most cards at the end of the game wins.

10.2	ten and 2 tenths	thirty six and seventy-nine hundredths	36.79
$8.24 > 8.239$	$8.239 < 8.24$	Numbers listed from greatest to least	8.000, 0.809, 0.800, 0.098
about 11	$\begin{array}{r} 5.921 \\ + \\ 3.1112 \\ + \\ 1.59876 \end{array}$	about 230	$\begin{array}{r} 22.634 \\ \times \\ 9.798 \end{array}$
	24%, 0.24	0.68	68%