

Central Dauphin School District
 Grade 4 Math: Unit 1 Parent Letter
 Place Value Concepts



Dear Parents,

Over the next several weeks, we will be learning about **place value** and **whole number operations** in math! The information below will help you to support your child as they learn these exciting, yet important fourth grade math skills.

The GOAL:

By the end of the unit, your child should be able to understand **how place values are related** and **add, subtract, multiply, and divide whole numbers.**

Place Value

Students must be able to understand how place values are related.

Thousands			Ones		
Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
4	6	7	8	9	2
$4 \times 100,000$	$6 \times 10,000$	$7 \times 1,000$	8×100	9×10	2×1
400,000	60,000	7,000	800	90	2

You can use a place-value chart and patterns to write numbers that are 10 times as much as any given number.

Each place to the left is 10 times as much as the place to its right.

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
10 times the ten thousands place	10 times the thousands place	10 times the hundreds place	10 times the tens place	10 times the ones place	

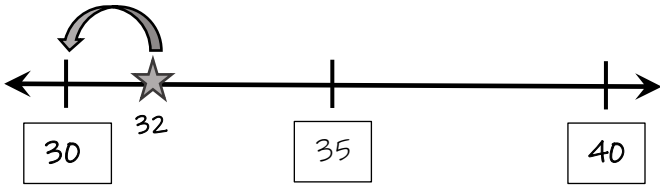
Find 10 times as much as 600. → 10 times as much as 6 hundreds is 6 thousands. So, 10 times as much as 600 is 6,000.

Help your child learn about rounding and ordering numbers:

Rounding **Two** Digit Numbers to the Nearest Ten and Hundred

Use number lines to round:

Round 32 to the nearest 10



Is 32 closer to 30 or 40? It is closer to 30 so 32 rounded to the nearest ten is 30.

Use place value to round:

Round 32 to the nearest 10

- Look at the digit to be rounded: 32
- Look at the digit to the right: 32

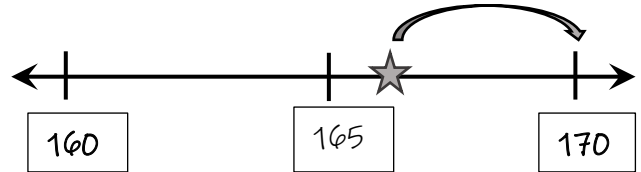
- If the digit to the right is 4 or less the rounded digit stays the same. If the digit to the right is 5 or more the rounded digit rounds up and the following digit(s) become zeros.

32 rounded to the nearest 10 is 30

Rounding **Three** Digit Numbers to the Nearest Ten and Hundred

Use number lines to round:

Round 166 to the nearest 10



Is 166 closer to 160 or 170? It is closer to 170 so 166 rounded to the nearest ten is 170.

Use place value to round:

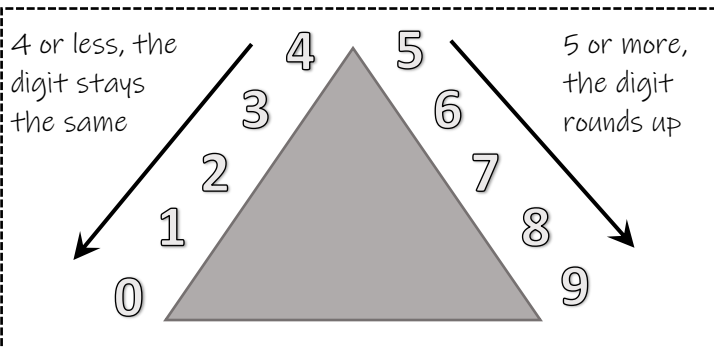
Round 166 to the nearest 100

- Look at the digit to be rounded: 166
- Look at the digit to the right: 166

- If the digit to the right is 4 or less the rounded digit stays the same, if the digit to the right is 5 or more the rounded digit rounds up and the following digit(s) become zeros.

- The digit to the right of the hundreds digit is a 6, so the hundreds place rounds up to 200.

166 rounded to the nearest hundred is 200





Place Value

Students must be able to understand how place values are related.

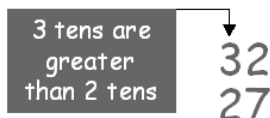
Comparing Numbers

Compare two numbers using symbols

<	less than	one value is smaller than the other
>	greater than	one value is greater than the other
=	equals	both values are the same

Examples: $340 < 430$
 $1,094 = 1,094$
 $929 > 928$

When you compare two-digit numbers, look at the tens place first, then the ones.



When you compare three-digit numbers, look at the hundreds place first, then the tens, and lastly the ones if needed.

When you compare four-digit numbers, look at the thousands place first, then the hundreds, then the tens, and lastly the ones if needed.

Ordering Numbers

Use place value to put numbers in ascending and descending order.

Least to greatest-

12, 16, 18, 21
734, 751, 760, 761

Greatest to least-

21, 18, 16, 12
761, 760, 751, 734

-- HOW TO HELP AT HOME --

- Use a deck of cards to put number cards in order or compare numbers that are greater and least.
- Write various multi-digit numbers on post-it notes. Have your child compare the numbers and put them in ascending and descending order.
- Roll dice to form 2 and 3 digit numbers. Practice rounding the numbers to the nearest ten or hundred.
- Use sidewalk chalk to create a large number line outdoors. Your child can practice creating the number line and using it to help them round numbers to the nearest ten and hundred.

Grade 4 Math: PA Core Math Standards in Unit 1

CC.2.1.4.B.1: Apply place-value concepts to show an understanding of multi-digit whole numbers.

-- KEY MATH VOCABULARY --

Place Value: value of the place a digit occupies in a number (ones place, tens place, hundreds place, etc.)

Order: arrangement of things in relation to a particular sequence

Least: the smallest amount or number

Greatest: the largest amount or number