



Excellenty Expanded!

Standard: MCC4.NBT.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.

Materials: Expanded Notation Cards (1-9, 10-90, 100-900, 1,000-9,000, 10,000-90,000, + sign cards)
Number Cards (Approx. 35 numbers up to 999,999)
Answer Key
Work Mat
Recording Sheet

1. Each pair of students arranges their expanded form cards so they may easily and quickly form numbers on their work mat.
2. The Leader places the number cards face down in the center of the group and all students place their hands on their shoulders.
3. The Leader turns over the top card and counts to 3.
4. Each pair tries to be the first to create the number on the card in expanded form, puts their hands on their shoulders and says, "Excellent."
5. The first pair to create the correct expanded form, and explain how they know they are correct, wins 5 points. The Leader or Co-Leader will check the answer key. All pairs who create the correctly expanded form of the number receive 2 points.
6. Each person then records the standard form of the number on the recording sheet. Repeat with the remaining cards as time allows.
7. Have each pair select 2 of the numbers to write in expanded form and "pizza" expanded form.

Challenges: Write each number in all forms possible.
Create numbers with more digits and greater place values.

1

2

3

4

5

6

7

8

9

0

Ones

+

+

+

10

20

30

40

50

60

70

80

90

0

Tens

+

+

+

100

200

300

400

500

600

700

800

900

0

Hundreds

+

+

+

0
Thousands

1,000

2,000

3,000

4,000

5,000

6,000

7,000

8,000

9,000

+

+

+

10,000

20,000

30,000

40,000

50,000

60,000

70,000

80,000

90,000

0

Ten

Thousands

+

+

+

100,000

200,000

300,000

400,000

500,000

600,000

700,000

800,000

900,000

0

Hundred
Thousands

+

+

+

2,526

461

4,012

129

9,298

503

73

813

45

992

43,164

87,076

651,661

969,840

369,632

Excellently
Expanded!



Example: 35,678

$$30,000 + 5,000 + 600 + 70 + 8$$

Example: 2,526

$$2,000 + 500 + 20 + 6$$

Excellently Expanded Recording Sheet

Names _____



Numbers: _____

Number in Standard Form

35,678

Expanded Form

$30,000 + 5,000 + 600 + 70 + 8$

"Pizza" Expanded Form

	3	5	6	7	8
	3	0	0	0	0
		5	0	0	0
			6	0	0
				7	0
					8

Word Form

Thirty-five thousand six hundred seventy-eight

Number in Standard Form

2,526

Expanded Form

$2,000 + 500 + 20 + 6$

"Pizza" Expanded Form

		2	5	2	6
		2	0	0	0
			5	0	0
				2	0
					6

Word Form

Two thousand five hundred twenty-six

Excellently Expanded Recording Sheet

Names _____



Numbers: _____

Number in Standard Form

--

Expanded Form

--

"Pizza" Expanded Form

--	--	--	--	--	--

Word Form

--

Number in Standard Form

--

Expanded Form

--

"Pizza" Expanded Form

--	--	--	--	--	--

Word Form

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$40,000 + 3,000 + 100 + 60 + 4$

43,164

$80,000 + 7,000 + 0 + 70 + 6$
tens

87,076

$600,000 + 50,000 + 1,000 + 600 + 60 + 1$

651,661

$900,000 + 60,000 + 9,000 + 800 + 40 + 0$
ones

969,840

$300,000 + 60,000 + 9,000 + 600 + 30 + 2$

369,632

$$2,000 + 500 + 20 + 6$$

2,526

$$4,000 + 0 + 10 + 2$$

hundreds

4,012

$$9,000 + 200 + 90 + 8$$

9,298

$$70 + 3$$

73

$$40 + 5$$

45

$$40,000 + 3,000 + 100 + 60 + 4$$

43,164

$$80,000 + 7,000 + 0 + 70 + 6$$

tens

87,076

$$500,000 + 50,000 + 1,000 + 600 + 60 + 1$$

651,661

$$900,000 + 60,000 + 9,000 + 800 + 40 + 0$$

ones

969,840

$$300,000 + 60,000 + 9,000 + 600 + 30 + 2$$

369,632

"Excellently Expanded" Point Sheet



NAMES:	POINTS:										

Name

Excellent Expanded

This number in expanded form is...	1,000 less than this number is...
<u>4</u>42,099	
The value of the underlined digit...	The place value of the underlined digit...

Tom wrote the number 45,378.

Bill wrote the number 36,721

How many times greater is the 7 in Bill's number than the 7 in Tom's number? _____

Use pictures, numbers, or words to demonstrate your reasoning.

PV Challenge

Is this statement true or false? Explain why.
 $57 + 23 > 67 + 3$
