Grade 1 Advanced Math

Unit 3: Place Value

Dear Families,

We want to make sure that you understand the mathematics your child will be learning this year. Below you will find the standards we will be learning in Unit 3.

Each standard is in bold print, and below each one is an explanation with examples. Please let your teacher know if you have any questions. We appreciate your partnership and support.

1.NR.1.2: Explain that the two digits of a 2-digit number represent the amounts of tens and ones.

Students should be able to…

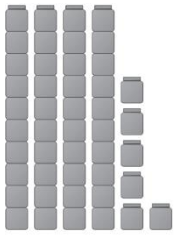
- recognize the relationship of a digit to its place indicates the number of groups represented in that place. For example: In the number 33, the digit "3" in the tens place has a value that is equivalent to three groups of ten. Students interpret the value of each digit. The number 33 has three tens and three remaining ones. They should also see this as equivalent to 33 ones.
- recognize that 10 can be thought of as a bundle of ten ones — called a "ten." Bundles could include groups of pennies, bundles of straws, or other hands-on manipulatives. The numbers from 11 to 19 are composed or decomposed as a ten and one, two, three, four, five, six, seven, eight, or nine ones.

Helpful Vocabulary:

- place value – the value of a digit based on its position within a number
- ones – a number that represents a single unit
- ten –a bundle of ten ones

Examples:

1. Write the number for 8 tens and 3 ones. _____
2. How many tens are in the number 40? _____
3. Which number Is in the ones place in the number 47? _____
4. Write 46 another way.



_____ tens _____ ones

Answers:

1. 83
2. 4
3. 7
4. 4 tens 6 ones

1.NR.1.3: Compare and order whole numbers up to 100 using concrete models, drawings, and the symbols >, =, and <.

Students should be able to…

- understand whole numbers up to 100 based on meanings of the tens and ones.
- record the results of comparisons with the symbols > (greater than), = (equal to), and < (less than).

Examples:

Write <, >, or = in each circle to compare the numbers:

1. 11 ◯ 15
2. 13 ◯ 31
3. 13 ◯ 31
4. 25 ones ◯ 2 tens
5. Write a number that makes this statement true:

   55 > _____

Answers:

1. <
2. <
3. <
4. >
5. Any number less than 55

1.NR.2.5*: Use the meaning of the equal sign to determine whether equations involving addition and subtraction are true or false (*only recognizing equal sets to compose and decompose numbers based on tens and ones in unit 3).

Students should be able to…

- explore and explain the relationship of the equal sign to quantities.
- orally justify if equations involving addition and subtraction are equal or not equal.

Example:

Which answer choice is NOT a sum of 10?

A. 2 + 8
B. 3 + 7
C. 6 + 3
D. 4 + 6

Answer:

C

1.PAR.3.2*: Identify, describe, and create growing, shrinking, and repeating patterns based on the repeated addition or subtraction of 1s, 2s, 5s, and 10s (*patterns by 1s and 10s in unit 3).

Students should be able to…

- use a variety of tools to recognize and explain patterns by 1s and 10s.
- investigate patterns found in authentic situations.

Helpful Vocabulary:

- growing pattern – patterns where there is an increase by a constant unit
- shrinking pattern – patterns where there is a decrease by a constant unit

Examples:

Fill in the blank for the next three numbers:

1. 29, _____, _____, _____, 33, 34

2. 67, 57, 47, _____, _____, _____

Answers:

1. 30, 31, 32
2. 37, 27, 17

Advanced Math Standard:

2.NR.1.1 Explain the value of a three-digit number using hundreds, tens, and ones in a variety of ways.

Students should be able to…

- put together (compose) and break apart (decompose) three-digit numbers.
- use concrete materials to develop an understanding of the place value structures, the relationship between numbers, and the value of quantities.

Examples:

1. What number is the same as 2 hundreds and 75 ones?

2. What place is the underlined digit?

   57<u>4</u>

3. What number has 3 ones, 7 tens, and 8 hundreds?

Answers:

1. 275
2. ones
3. 873