Grade 5 – Unit 5: Multiplication (two-digit by two-digit) (Application of Partitioning)

Representing and Partitioning Numbers to 1 000 000

N01 Students will be expected to represent and partition whole numbers to 1 000 000. [C, CN, T, V]

Performance Indicators

N01.01 Read a given numeral without using the word "and." **** Does not apply for French***
N01.02 Record numerals for numbers expressed orally, concretely, pictorially, or symbolically as expressions, using proper spacing without commas.
N01.03 Describe the pattern of adjacent place positions moving from right to left.
N01.04 Explain the meaning of each digit in a given numeral.
N01.05 Provide examples of large numbers used in print or electronic media.
N01.06 Express a given numeral in expanded notation.
N01.07 Write the numeral represented by a given expanded notation.
N01.08 Compare and order numbers to 1 000 000 in a variety of ways.
N01.09 Represent a given numeral, 0 to 1 000 000, using a place-value chart.
N01.10 Represent a given number, 0 to 1 000 000, in a variety of ways, and explain how they are equivalent.
N01.11 Represent a given number, 0 to 1 000 000, using expressions.
N01.12 Read and write given numerals, 0 to 1 000 000, in words. **** Correct spelling is not required***

**** At this point in the year, students are beginning to develop meaning for numbers from 10 000 to 1 000 000. It would be appropriate for students to be working with any five- and six-digit numbers, however, proficiency with the full range of numbers 10 000 to 1 000 000 is not expected in unit 5.***

Limited	Developing	Competent	In-Depth
Student can represent a **four-digit** number and **model** an equivalent representation (e.g. place value chart, number line, expanded notation, etc.).	Student can represent **some** numbers to 1 000 000 in a **variety** of ways (e.g. place value chart, number line, expanded notation, etc.) and **model** an equivalent representation.	Student can represent **a given** number to 1 000 000 in a **variety** of ways (e.g. place value chart, number line, expanded notation, etc.) and explain how the representations are equivalent.	Student can **explain the strategy used to translate** a **variety** of equivalent representations and expressions (e.g. place-value chart to a numeral or a base-ten picture to expanded form).
Student can record numerals for **four-digit** numbers expressed orally **and/or** concretely **and/or** pictorially **and/or** by a given expanded notation **and/or** symbolically as expressions.	Student can record numerals for **some** numbers to 1 000 000 expressed orally **and/or** concretely **and/or** pictorially **and/or** by a given expanded notation **and/or** symbolically as expressions.	Student can record numerals for **a given number** to 1 000 000 expressed orally, concretely, pictorially, by a given expanded notation and symbolically as expressions (Including numbers presented in non-standard arrangements (e.g. base-ten blocks placed in random order, expressions and expanded form with place values out of sequence or with 0 place holders, etc.).	
Student can recognize the pattern of adjacent place positions moving right to left **and/or** student can **model** the meaning of each digit for **some** numerals.	Student can **recognize** the pattern of adjacent place positions moving right to left **and/or** student can **model** the meaning of each digit in **a given** numeral to one million.	Student can **recognize and describe** the pattern of adjacent place positions moving right to left and student can explain the meaning of each digit in **a given** numeral to one million.	
Student can compare and order **some four-digit** numbers using a **model** (e.g. base-ten, place value chart, etc.).	Student can compare and order numbers to 1 000 000 using a **model** (e.g. base-ten, place value chart, etc.).	Student can compare and order numbers to 1 000 000 in a **variety** of ways (e.g. number lines, place value charts, etc.).	Student can use **benchmarks** and the place value system to **efficiently** compare and order numbers.
Student can read and write **four-digit** numbers in numerals **and/or** words **and/or** expanded notation.	Student can read and write **some** numbers to one million in numerals **and/or** words **and/or** expanded notation.	Student can read and write **a given** number to one million in numerals, words and expanded notation. Student can provide examples of large numbers (to 1 000 000) used in print or electronic media.	