## GRADE 5 MATH PREREQUISITE SKILLS Leaving Grade 4 Students Being Able to Do

(with Understanding)

## Ways to use this list:

- Assess Grade 4 students during the course of the school year and at the end of the school year to track progress towards being able to do these skills at a Stage 3 or Stage 4 level of fluency. Share that information with the Grade 5 teachers.
- Assess incoming Grade 5 students at the beginning of the school year to measure for summer loss/retention. Design math centers and fluency routines to support student progress for the first two months of school.

#	Skill Can the student	Stage of Fluency	Grade 4 Standard(s)
1	Add/Subtract within 1 million using the traditional algorithm and precise mathematical language to explain algorithms. Is able to select another strategy when the traditional algorithm is not efficient, e.g., when finding the difference of 5,000 - 1,346, it is inefficient to regroup across the zeros using the traditional algorithm.	3	4.NBT.4
2	Multiply single-digit factors by single-digit factors.	4	4.0A
3	Explain and show multiplication as a comparison of the product as related to each factor using precise math models.	3	4.OA.1 4.OA.2
4	Tell the factors of a number within 100.	3 - 4	4.0A.4
5	Tell if a number is a multiple of a given single-digit number.	3	4.0A.4
6	Identify patterns with prime and composite numbers.	3	4.0A.4
7	Use the data presented in graphs to solve word problems.	3	3.MD.3 3.MD.4 4.MD.4
8	Read (with comprehension) word problem situations, then be able to discuss how mathematics is involved and choose tools, models and/or strategies to resolve the problem.	3	4.OA.1 4.OA.2 4.OA.3 4.NF.3d 4.NF.4c 4.MD.3
9	Round multi-digit numbers using math models and strategies based upon place value.	3	4.OA.3 4.NBT.3
10	Read multi-digit numbers using whole numbers up to and including 1,000,000 using	4	4.NBT.2
11	?		
12	Compare multi-digit numbers using inequality symbols (<, >, =), and being able to state the converse relationships, e.g. 34 > 15 can be said as 34 is greater than 15, but the converse is true that 15 is less than 34.	3 - 4	4.NBT.2
13	Tell ten times more and less on a whole number by using place value strategies.	3 - 4	4.NBT.1
14	Write using whole numbers up to and including 1,000,000 in unit form, expanded form and in written form.	3	4.NBT.2
15	Multiply whole numbers by 10, 100, or 1,000	4	4.NBT.5

16	Divide multiples of 10, 100, 1,000 by 10.	4	4.NBT.1 4.NBT.5
17	Multiple (4-digit whole numbers by a single-digit or double-digit by double-digit factors) using tools, models and strategies based upon place value and the properties of operations using precise math language.	3	4.NBT.5
18	Divide up to and including 4-digit whole numbers by a single-digit divisors using tools, models and strategies based upon place value and the properties of operations using precise math language.	3	4.NBT.6
19	Decompose any fraction into smaller parts or unit fractions within the same unit, e.g., $\frac{3}{4}$ is $\frac{1}{4}$ plus $\frac{2}{4}$	4	4.NF.3 4.NF.5
20	Compare fractions with unlike denominators using various math tools, models and strategies related to benchmark fractions.	3	4.NF.2 4.NF.7
21	Generate, identify and explain equivalent fractions using math tools, math models and strategies based upon the number and the size of the parts.	3	4.NF.1
22	Add/Subtract fractions (including mixed numbers) within the same unit, including situations where regrouping may be needed, using tools, models and strategies based upon the properties of operations using precise math language.	3	4.NF.3
23	Multiply fractions by whole number amounts.	3	4.NF.4
24	Write/Tell equivalent expressions of fractions multiplied by a whole number, e.g., 3 groups of % is the same as 6 groups of %.	3 - 4	4.NF.4
25	Read decimals to the hundredths place and write in fractional form.	4	4.NF.5 4.NF.6 4.NF.7
26	Use a ratio table to generate and model multiplicative and proportional relationships.	3	4.MD.1
27	Convert with a system of measurement.	3 - 4	4.MD.1