**MATH STANDARDS: REQUIRED FLUENCIES AND CLUSTERS**

**4**

A PACIFIC UNION CONFERENCE CORRELATION OF NAD AND CCSS

Required fluencies are the skills to be mastered at this level. Clusters define where students and teachers should spend a large majority of their time in order to meet the expectations of the standards. Each fluency/cluster is linked to the corresponding NAD and Common Core Standard. The teacher will notice the NAD Standards are summarized and the Common Core standards provide an extensive explanation of the standards.

**Color Key:** Major Clusters Supporting Clusters Additional Clusters

Common Core State Standards (CCSS) North American Division Standards (NAD)

| **Fluencies / Clusters** | | **GoMath Correlation** | **Assessment Dates** | | **Notes**  **(Struggling students, additional resources & ideas, etc.)** |
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| **Required**  **Fluencies** | Add and subtract within 1,000,000.  ([NAD 4.NO.3](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Numbers%20and%20Operations.pdf)) ([CCSS 4.NBT.4](http://www.corestandards.org/Math/Content/4/NBT/)) | 1.6, 1.7, 1.8, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.10, 2.11, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 4.1, 4.2, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10, 4.11 |  |  |  |
| **NUMBERS AND OPERATIONS (NAD) / NUMBER AND OPERATIONS IN BASE TEN (CCSS)** | | | | | |
| Generalize place value understanding for multi-digit whole numbers.  ([NAD 4.NO.1-2](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Numbers%20and%20Operations.pdf)) ([CCSS 4.NBT.1-3](http://www.corestandards.org/Math/Content/4/NBT/)) | | 1.1, 1.2, 1.3, 1.4, 1.5 |  |  |  |
| Use place value understanding and properties of operations to perform multi-digit arithmetic.  ([NAD 4.NO.3](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Numbers%20and%20Operations.pdf)) ([CCSS 4.NBT.4-6](http://www.corestandards.org/Math/Content/4/NBT/)) | | 1.6, 1.7, 1.8, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.10, 2.11, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 4.1, 4.2, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10, 4.11 |  |  |  |
| **NUMBERS AND OPERATIONS (NAD) / NUMBER AND OPERATIONS – FRACTIONS (CCSS)** | | | | | |
| Extend understanding of fraction equivalence and ordering.  ([NAD 4.NO.4](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Numbers%20and%20Operations.pdf)) ([CCSS 4.NF.1-2](http://www.corestandards.org/Math/Content/4/NF/)) | | 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8 |  |  |  |
| Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers. ([NAD 4.NO.5](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Numbers%20and%20Operations.pdf)) ([CCSS 4.NF.3-4](http://www.corestandards.org/Math/Content/4/NF/)) | | 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 7.10, 8.1, 8.2, 8.3, 8.4, 8.5 |  |  |  |
| Understand decimal notation for fractions, and compare decimal fractions.  ([NAD 4.NO.6](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Numbers%20and%20Operations.pdf)) ([CCSS 4.NF.5-7](http://www.corestandards.org/Math/Content/4/NF/)) | | 9.1, 9.2, 9.3, 9.4, 9.6, 9.7 |  |  |  |
| **OPERATIONS AND ALGEBRAIC THINKING (NAD / CCSS)** | | | | | |
| Use the four operations with whole numbers to solve problems.  ([NAD 4.OAT.2](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 4.OA.1-3](http://www.corestandards.org/Math/Content/4/OA/)) | | 2.1, 2.2, 2.9, 2.12, 3.7, 4.3, 4.12 |  |  |  |
| Gain familiarity with factors and multiples.  ([NAD 4.OAT.3](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 4.OA.4](http://www.corestandards.org/Math/Content/4/OA/)) | | 5.1, 5.2, 5.3, 5.4, 5.5 |  |  |  |
| Generate and analyze patterns.  ([NAD 4.OAT.5](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 4.OA.5](http://www.corestandards.org/Math/Content/4/OA/)) | | 5.6, 10.7 |  |  |  |
| **MEASUREMENT (NAD) / MEASUREMENT AND DATA (CCSS)** | | | | | |
| Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.  ([NAD 4.M.1-3](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Measurement.pdf)) ([CCSS 4.MD.1-3](http://www.corestandards.org/Math/Content/4/MD/)) | | 9.5, 12.1, 12.2, 12.3, 12.4, 12.6, 12.7, 12.8, 12.9, 12.10, 12.11, 13.1, 13.2, 13.3, 13.4, 13.5 |  |  |  |
| Geometric measurement: understand concepts of angle and measure angles.  ([NAD 4.M.5](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Measurement.pdf)) ([CCSS 4.MD.5-7](http://www.corestandards.org/Math/Content/4/MD/)) | | 11.1, 11.2, 11.3, 11.4, 11.5 |  |  |  |
| **GEOMETRY (NAD / CCSS)** | | | | | |
| Draw and identify lines and angles, and classify shapes by properties of their lines and angles.  ([NAD 4.GEO.1-3](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Geometry.pdf)) ([CCSS 4.G.1-3](http://www.corestandards.org/Math/Content/4/G/)) | | 10.1, 10.2, 10.3, 10.4, 10.5, 10.6 |  |  |  |
| **DATA ANALYSIS, STATISTICS, AND PROBABILITY (NAD) / MEASUREMENT AND DATA (CCSS)** | | | | | |
| Represent and interpret data.  ([NAD 4.DSP.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Data%20Analysis%20Statistics%20and%20Probability.pdf)) ([CCSS 4.MD.4](http://www.corestandards.org/Math/Content/4/MD/)) | | 10.6, 12.5 |  |  |  |