**MATH STANDARDS: REQUIRED FLUENCIES AND CLUSTERS**

**5**

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** | | **Go Math Correlation** | **Assessment Dates** | | **Notes**  **(Struggling students, additional resources & ideas, etc.)** |
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| **Required**  **Fluencies** | Multi-digit multiplication.  ([NAD 5.NO.3](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Numbers%20and%20Operations.pdf)) ([CCSS 5.NBT.5](http://www.corestandards.org/Math/Content/5/NBT/)) | 1.3, 1.6, 1.7, 1.8, 1.9, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.8, 2.9, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 3.12, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8 |  |  |  |
| **NUMBERS AND OPERATIONS (NAD) / NUMBER AND OPERATIONS IN BASE TEN (CCSS)** | | | | | |
| Understand the place value system.  ([NAD 5.NO.1-2](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Numbers%20and%20Operations.pdf)) ([CCSS 5.NBT.1-4](http://www.corestandards.org/Math/Content/5/NBT/)) | | 1.1, 1.2, 1.4, 1.5, 3.1, 3.2, 3.3, 3.4, 4.1, 4.3, 4.4, 4.7, 4.8, 5.1, 5.4, 5.6 |  |  |  |
| Perform operations with multi-digit whole numbers and with decimals to hundredths.  ([NAD 5.NO.3](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Numbers%20and%20Operations.pdf)) ([CCSS 5.NBT.5-7](http://www.corestandards.org/Math/Content/5/NBT/)) | | 1.3, 1.6, 1.7, 1.8, 1.9, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.8, 2.9, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 3.12, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8 |  |  |  |
| **NUMBERS AND OPERATIONS (NAD) / NUMBER AND OPERATIONS – FRACTIONS (CCSS)** | | | | | |
| Use equivalent fractions as a strategy to add and subtract fractions.  ([NAD 5.NO.4](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Numbers%20and%20Operations.pdf)) ([CCSS 5.NF.1-2](http://www.corestandards.org/Math/Content/5/NF/)) | | 2.7, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8, 6.9, 6.10, 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 |  |  |  |
| Apply and extend previous understandings of multiplication and division to multiply and divide fractions.  ([NAD 5.NO.4](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Numbers%20and%20Operations.pdf)) ([CCSS 5.NF.4-7](http://www.corestandards.org/Math/Content/5/NF/)) | | 2.7, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8, 6.9, 6.10, 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 |  |  |  |
| **OPERATIONS AND ALGEBRAIC THINKING (NAD / CCSS)** | | | | | |
| Write and interpret numerical expressions.  ([NAD 5.OAT.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 5.OA.1-2](http://www.corestandards.org/Math/Content/5/OA/)) | | 1.10, 1.11, 1.12 |  |  |  |
| Analyze patterns and relationships.  ([NAD 5.OAT.3](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Operations%20and%20Algebraic%20Thinking.pdf)) ([CCSS 5.OA.3](http://www.corestandards.org/Math/Content/5/OA/)) | | 9.5, 9.6, 9.7 |  |  |  |
| **MEASUREMENT (NAD) / MEASUREMENT AND DATA (CCSS)** | | | | | |
| Convert like measurement units within a given measurement system.  ([NAD 5.M.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Measurement.pdf)) ([CCSS 5.MD.1](http://www.corestandards.org/Math/Content/5/MD/)) | | 10.1, 1.02, 10.3, 10.4, 10.5, 10.6, 10.7 |  |  |  |
| Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.  ([NAD 5.M.2](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Measurement.pdf)) ([CCSS 5.MD.3-5](http://www.corestandards.org/Math/Content/5/MD/)) | | 11.5, 11.6, 11.7, 11.8, 11.9, 11.10, 11.11, 11.12 |  |  |  |
| **GEOMETRY (NAD / CCSS)** | | | | | |
| Graph points on the coordinate plane to solve real-world and mathematical problems.  ([NAD 5.GEO.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Geometry.pdf)) ([CCSS 5.G.1-2](http://www.corestandards.org/Math/Content/5/G/)) | | 9.2, 9.3, 9.4 |  |  |  |
| Classify two-dimensional figures into categories based on their properties.  ([NAD 5.GEO.2](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Geometry.pdf)) ([CCSS 5.G.3-4](http://www.corestandards.org/Math/Content/5/G/)) | | 11.1, 11.2, 11.3, 11.4 |  |  |  |
| **DATA ANALYSIS, STATISTICS, AND PROBABILITY (NAD) / MEASUREMENT AND DATA (CCSS)** | | | | | |
| Represent and interpret data.  ([NAD 5.DSP.1](http://adventisteducation.org/downloads/pdf/Elementary%20Math%20Standards%20Data%20Analysis%20Statistics%20and%20Probability.pdf)) ([CCSS 5.MD.2](http://www.corestandards.org/Math/Content/5/MD/)) | | 9.1 |  |  |  |