ADVENTIST EDUCATION STANDARDS

Standards, what learners should know (content) and be able to do (skills), serve as the framework for curriculum development. Standards in NAD Seventh-day Adventist schools reflect the Adventist worldview across the K-12 curricula as well as the integration of national and provincial/state standards. The Adventist worldview accepts the Bible as the standard by which everything else is measured. Four key concepts emerge from a biblical worldview that can be used as a lens for curriculum development, as well as informing the essential questions and big ideas of any content area: Creation (What is God's intention?), Fall (How has God's purpose been distorted?), Redemption (How does God help us to respond?), and Re-creation (How can we be restored in the image of God?).

— THE CORE OF ADVENTIST EDUCATION CURRICULUM

COMMON CORE STATE STANDARDS FOR MATHEMATICAL PRACTICE

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

STANDARDS CODING

The standards have been coded so that educators can easily refer to them in their curriculum, instruction, and assessment practices. The coding system that precedes each standard begins with the content area abbreviation in letters; all are identified with M—Math (**M**.K.NO.1). The second part of the code refers to the grade level (M.**K**.NO.1). The third part of the code refers to the particular math domain (M.K.**NO**.1), with NO standing for Numbers and Operations. The fourth part of the code refers to a particular skill within the math domain (M.K.NO.**1**). The coding system that follows each standard is the Common Core State Standards for Mathematics (CCSSM) that aligns with the NAD standard. Where no CCSSM is noted, there is no corresponding CCSSM.

CREDITS

The following resources were referenced in developing *Elementary Mathematics Standards for Seventh-day Adventist Schools*: a sampling of state standards, the National Council of Teachers of Mathematics (NCTM), NAD Curriculum Guide for Mathematics, Common Core State Standards for Mathematics (CCSSM), and The Core of Adventist Education Curriculum.

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NUMBERS AND OPERATIONS

GRADE	CONTENT	SKILLS	GO MATH!/BIG IDEAS MATH LESSON CORRELATION
Essential Question: What do numbers represent and how do they help us order and compare things in God's world?		**Big Idea:** Numbers represent an amount that helps us order and compare things in God's world.	
K	**Numbers**	**K.NO.1** Know number names and count up to 100 by ones and tens (K.CC.1,2) **K.NO.2** Read and write numbers 0 to 20 (K.CC.3) **K.NO.3** Count to tell the number of objects and be able to represent as a written numeral (K.CC.3,4,5) **K.NO.4** Compare number of objects between groups; compare written numerals between 1 and 10 (K.CC.6,7)	
	Place Value	**K.NO.5** Begin to organize objects up to 19 into groups of tens and ones (K.NBT.1)	
1	**Numbers**	**1.NO.1** Count, read, write, and understand numbers up to 120 (1.NBT.1) **1.NO.2** Count by twos, fives, and twenty-fives up to 100	**Chapter** 6.1, 6.2, 6.9, 6.10
	Place Value	**1.NO.3** Understand and compare two-digit numbers organized as groups of tens and ones (1.NBT.2,3) **1.NO.4** Understand and mentally find ten more or ten less than a given two-digit number (1.NBT.5) **1.NO.5** Add and subtract multiples of ten within 100 using models or drawings (1.NBT.4,6)	**Chapter** 6.3, 6.4, 6.5, 6.6, 6.7, 6.8, 7.1, 7.2, 7.3, 7.4 **Chapter** 7.5 **Chapter** 8.2, 8.3, 8.4, 8.5 8.6, 8.7, 8.8, 8.9
2	**Numbers**	**2.NO.1** Read, write, and understand numbers up to 1000 using standard, number name, and expanded forms (2.NBT.3) **2.NO.2** Count by ones, fives, tens, and hundreds up to 1000 (2.NBT.2)	**Chapter** 1.3, 1.4, 1.5, 1.6, 1.7, 2.6, 2.7, 2.8 **Chapter** 1.8, 1.9
	Place Value	**2.NO.3** Understand and compare three-digit numbers organized as groups of hundreds, tens, and ones; use place value to understand addition and subtraction (2.NBT.1,4,9) **2.NO.4** Mentally add and subtract multiples of ten and multiples of a hundred within 1000 (2.NBT.8) **2.NO.5** Add and subtract within 1000 with regrouping using models or drawings (2.NBT.7)	**Chapter** 2.1, 2.2, 2.3, 2.4, 2.5, 2.11, 2.12, 4.4, 5.3 **Chapter** 2.9, 2.10 **Chapter** 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8, 6.9, 6.10
Assessments		Math Interviews; Checklists; Written Assessments; Student Demonstrations; Models and Drawings	
Essential Question: What does numerical reasoning involve and what does it demonstrate about God's world?		**Big Idea:** Numerical reasoning with whole numbers and fractions demonstrates dependability and order in God's world.	
3	**Place Value**	**3.NO.1** Use place value understanding of up to five-digit whole numbers to round to the nearest 10, 100, and 1,000 (3.NBT.1)	**Chapter** 1.2, 1.3, 1.8
	Addition/ Subtraction	**3.NO.2** Add and subtract up to four digits with and without regrouping (3.NBT.2)	**Chapter** 1.4, 1.5, 1.6, 1.7, 1.9, 1.10, 1.11
	Fractions	**3.NO.3** Understand, express, and order fractions between zero and one, simple mixed numbers, and whole numbers as fractions (3.NF.1,2) **3.NO.4** Understand and create equivalent fractions with denominators 2,3,4,6,8 using fraction models (3.NF.3)	**Chapter** 8.1, 8.2, 8.3, 8.4, 8.5, 8.7, 8.8, 8.9 **Chapter** 8.6, 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7
4	**Place Value**	**4.NO.1** Use place value understanding of multi-digit whole numbers to round to any place up to millions (4.NBT.1,3) **4.NO.2** Read, write, compare, and understand whole numbers using standard, number name, and expanded forms (4.NBT.2)	**Chapter** 1.1, 1.5, 1.4 **Chapter** 1.2, 1.3
	Basic Operations	**4.NO.3** Add and subtract multi-digit whole numbers; multiply up to 4 digits X 1 digit and 2 digits X 2 digits; divide using a one-digit divisor and up to a four-digit dividend with and without a remainder (4.NBT.4,5,6)	**Chapter** 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
	Fractions/Decimals	**4.NO.4** Understand, express, and order fractions with different numerators and denominators; numerically express equivalent fractions (4.NF.1,2) **4.NO.5** Add and subtract fractions and mixed numbers with common denominators; multiply fractions by whole numbers (4.NF.3,4) **4.NO.6** Understand, compare, and use decimal notation for fractions with denominators of 10 or 100 (4.NF.5,6,7)	**Chapter** 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8 **Chapter** 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 **Chapter** 9.1, 9.2, 9.3, 9.4, 9.6, 9.7
5	**Place Value**	**5.NO.1** Read, write, and compare decimals to the thousandths place using standard, number name, and expanded forms; round decimals to any place (5.NBT.3,4) **5.NO.2** Explain patterns in relation to the powers of 10 (5.NBT.1,2)	**Chapter** 3.2, 3.3, 3.4, **Chapter** 1.1, 1.2, 1.4, 1.5, 3.1, 4.1, 4.3, 4.4, 4.7, 4.8, 5.1, 5.4, 5.6,
	Basic Operations	**5.NO.3** Multiply multi-digit whole numbers; divide using a two-digit divisor and up to a four-digit dividend; add, subtract, multiply, and divide decimals up to the hundredths place (5.NBT.5,6,7)	**Chapter** 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
	Fractions	**5.NO.4** Add and subtract fractions and mixed numbers with unlike denominators; multiply a fraction or a whole number by a fraction; divide fractions by whole numbers (5.NF.1,2,3,4,5,6,7) **5.NO.5** Simplify fractions to lowest terms	**Chapter** 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, 8.3, 8.1, 8.2, 8.4, 8.5
Assessments		Journal Entries; Class Discussions; Written Assessments; Open-ended Projects and Problems; Oral Reports; Virtual Models	

NUMBERS AND OPERATIONS

GRADE	CONTENT	SKILLS	GO MATH!/BIG IDEAS MATH LESSON CORRELATION
Essential Question: How can we use God's gift of the number system to understand the world and all created things?		**Big Idea:** The use of the number system to help us understand the world and all created things is a gift from God.	
6	**Rational Numbers**	**6.NO.1** Add, subtract, multiply, and divide multi-digit whole numbers and decimals (6.NS.2,3) **6.NO.2** Find common factors and multiples (6.NS.4); understand and apply prime factorization and exponents (6.EE.1) **6.NO.3** Understand, compare, and order integers; apply integer principles within the four basic operations; graph ordered pairs on a coordinate plane (6.NS.5,6,7,8) **6.NO.4** Divide fractions by fractions; express a remainder as a fraction or decimal; convert within fractions, decimals, and percents; convert fractions to terminating, repeating, or rounded decimals (6.NS.1)	**Chapter** 1.1, 1.6, 1.7, 1.8, 1.9/**Section** 2.8, 3.1, 3.2, 3.3, 3.4, 3.5 **Chapter** 1.2, 1.3, 1.4, 1.5, 2.3, 2.4, 7.1, 7.2/**Section** 1.1, 1.4 **Chapter** 2.1, 2.2, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10/**Topic** 1, 2, 3, 4, **Section** 4.3 **Chapter** 2.5, 2.6, 2.7, 2.8, 2.9, 2.10/ **Section** 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7
	Ratios/Proportions/ Percentages	**6.NO.5** Understand and apply ratio concepts and use ratio reasoning to solve problems (6.RP.1,2,3)	**Chapter** 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6/ **Section** 4.1, 4.2, 4.4, 4.5, 5.1, 5.2, 5.3
7	**Rational Numbers**	**7.NO.1** Apply and extend the four basic operations to rational numbers (7.NS.1,2,3) **7.NO.2** Understand and apply properties of operations (7.NS.2) **7.NO.3** Perform operations with numbers expressed in scientific notation, exponents, and square root	**Section** 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.3b **Section** 1.4, 1.5, 2.1, 2.3 2.3b
	Ratios/Proportions/ Percentages	**7.NO.4** Analyze and apply proportional relationships (7.RP.1,2,3)	**Section** 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.7b, 3.8, 4.1, 4.2, 4.3, 4.4
8	**Rational/Irrational Numbers**	**8.NO.1** Informally understand and use number sense for irrational numbers (8.NS.1,2)	**Section** 6.3, 6.3b, 6.4
Assessments		Journal Entries; Class Discussions; Written Assessments; Open-ended Projects and Problems; Oral Reports; Virtual Models	