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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MEASUREMENT

GRADE	CONTENT	SKILLS	GO MATH!/BIG IDEAS MATH LESSON CORRELATION
Essential Question			

Essential Question: How does measurement help us fulfill God's plan? | **Big Idea:** Measurement allows us to be accurate and orderly as God planned.

GRADE	CONTENT	SKILLS	GO MATH!/BIG IDEAS MATH LESSON CORRELATION
K	Measurement	**K.M.1** Describe and compare measurable attributes of objects, such as length or weight (K.MD.1,2) **K.M.2** Understand that thermometers are used to measure temperature	
	Time	**K.M.3** Order a sequence of events by time (e.g., before, after, morning, night, seasons) **K.M.4** Understand that clocks and calendars are used to measure time	
1	Length	**1.M.1** Measure, order, compare, and express lengths of objects by counting non-standard units (1.MD.1,2)	**Chapter** 9.1, 9.2, 9.3, 9.4, 9.5
	Time	**1.M.2** Tell and write time in hours and half-hours using analog and digital clocks (1.MD.3)	**Chapter** 9.6, 9.7, 9.8, 9.9
	Money	**1.M.3** Identify pennies, nickels, dimes, quarters, half-dollars, and dollar bills	
2	Length	**2.M.1** Measure and estimate lengths in standard units (e.g., inches, feet, centimeters, meters) using appropriate tools (e.g., rulers, yardsticks, meter sticks) (2.MD.1,3) **2.M.2** Measure, compare, and describe the length of an object using two units of measurement (e.g, inches and yards, centimeters and meters) (2.MD.2) **2.M.3** Measure to compare the length of two objects using a standard length unit (2.MD.4) **2.M.4** Use addition and subtraction equations within 100 to solve word problems involving lengths of the same unit (2.MD.5) **2.M.5** Represent whole numbers as equally spaced lengths from 0 on a number line; represent sums and differences within 100 on a number line (2.MD.6)	**Chapter** 8.1, 8.2, 8.3, 8.4, 8.7, 8.8, 9.1, 9.2, 9.3, 9.6 **Chapter** 8.6, 9.5 **Chapter** 9.7 **Chapter** 8.5, 9.4 **Chapter** 8.5, 9.4
	Time	**2.M.6** Tell and write time to the nearest five minutes from analog and digital clocks using a.m. and p.m. (2.MD.7)	**Chapter** 7.8, 7.9, 7.10, 7.11
	Money	**2.M.7** Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ (2.MD.8)	**Chapter** 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7
Assessments		Math Interviews; Checklists; Graphs; Measurement Tools, Clocks, Money; Written Assessments	

Essential Question: What do the attributes of measurement reveal about God? | **Big Idea:** The attributes of measurement reveal God's accuracy, dependability, and precision.

GRADE	CONTENT	SKILLS	GO MATH!/BIG IDEAS MATH LESSON CORRELATION
3	Measurement	**3.M.1** Solve problems involving measurement and estimation of intervals of time (nearest minute), liquid volume (liter), and masses of objects (gram, kilogram) (3.MD.1,2) **3.M.2** Read and understand a calendar using day, week, month, and year **3.M.3** Explain and measure temperature using Celsius and Fahrenheit scales	**Chapter** 10.1, 10.2, 10.3, 10.4, 10.5, 10.7, 10.8, 10.9
	Geometric Measurement	**3.M.4** Understand concepts of area and its measurement by counting unit squares (cm^2, m^2, in^2, ft^2); apply multiplication and addition to area (3.MD.5,6,7) **3.M.5** Solve real-world and mathematical problems recognizing area and perimeter of plane figures; distinguish between linear and area measurements (3.MD.8)	**Chapter** 11.4, 11.5, 11.6, 11.7, 11.8 **Chapter** 11.1, 11.2, 11.3, 11.9, 11.10
	Money	**3.M.6** Construct various equivalent combinations of money; add and subtract money amounts	
4	Measurement/ Conversion	**4.M.1** Solve problems involving measurement (time, volume, mass, money, simple fractions, decimals, distance) (4.MD.2) **4.M.2** Convert measurement from a larger unit to a smaller unit (km, m, cm; kg, g; lb, oz; L, mL; hr, min, sec) (4.MD.1) **4.M.3** Apply area and perimeter formulas (4.MD.3) **4.M.4** Read a Fahrenheit and Celsius thermometer knowing the significance of 32°F, 212°F, 0°C, and 100°C	**Chapter** 9.5, 12.7, 12.9, 12.10 **Chapter** 12.1, 12.2, 12.3, 12.4, 12.6, 12.7, 12.8, 12.11 **Chapter** 13.1, 13.2, 13.3, 13.4, 13.5
	Angles	**4.M.5** Recognize angles as geometric shapes that are formed wherever two rays share a common end point; understand concepts of angle measurement and measure angles in whole-number degrees (4.MD.5,6,7)	**Chapter** 11.1, 11.2, 11.3, 11.4, 11.5
	Money	**4.M.6** Know how to count up to make change	
5	Conversion	**5.M.1** Convert like units within a given measurement system (e.g., cm to m, m to cm) (5.MD.1)	**Chapter** 10.1, 10.2, 10.3, 10.4, 10.6, 10.7
	Volume	**5.M.2** Understand concepts of volume measurement in cubic measure (cm^3, in^3, ft^3) and apply to multiplication and addition (5.MD.3,4,5)	**Chapter** 11.5, 11.6, 11.7, 11.8, 11.9, 11.10, 11.11, 11.12
	Geometric Measurement	**5.M.3** Know the relationship between radius and diameter	
Assessments		Written Assessments; Journal Entries; Class Discussions; Open-ended Projects and Problems; Visual and Virtual Models; Diagrams	

Essential Question: How can we show honor to God by being faithful and accurate in our measurements? | **Big Idea:** God is concerned that we be accurate and orderly in our use of weights, measures, and numbers.

GRADE	CONTENT	SKILLS	GO MATH!/BIG IDEAS MATH LESSON CORRELATION
6	Elapsed Time	**6.M.1** Calculate elapsed time	
7	Measurement Systems	**7.M.1** Convert between a variety of standard/metric measures (e.g., in to cm, cm to in)	
8	Mathematical Precision	**8.M.1** Use appropriate significant digits in calculations	
Assessments		Open-ended Projects and Problems; Written Assessments; Journal Entries; Class Discussions; Oral Reports; Visual and Virtual Models	