

A JOURNEY TO EXCELLENCE

Elementary Mathematics

2012

ELEMENTARY MATHEMATICS STANDARDS IN SEVENTH-DAY ADVENTIST SCHOOLS

OFFICE OF EDUCATION North American Division Seventh-day Adventist Church

Common Core State Standards for Mathematical Practice

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

DEVELOPMENT COMMITTEE MEMBERS

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2012 MATHEMATICS — DATA ANALYSIS, STATISTICS, AND PROBABILITY

GRADE	CONTENT	SKILLS		GO MATH!/BIG IDEAS MATH LESSON CORRELATION
			Big Idea: God has at various times measure, and record their findings.	
K	Data	K.DSP.1 Classify objects into given categories; count the number of objects in each category and sort the categories by count up to 10 (K.MD.3)		
1	Data	1.DSP.1 Organize, represent, compare, and interpret data with up to three categories (1.MD.4)		Chapter 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7
2	Data	2.DSP.1 Generate measurement data by measuring lengths of several objects to the nearest whole unit; show the measurements by making a line plot (2.MD.9) 2.DSP.2 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories; solve simple addition, subtraction, and comparison problems using information in a bar graph (2.MD.10)		Chapter 8.9 Chapter 10.1, 10.2, 10.3, 10.4, 10.5, 10.6
Assessments		Math Interviews; Graphs; Written Assessments		
3	Data	3.DSP1 Draw and interpret scaled picture and bar graphs to represent a data set (3.MD.3) 3.DSP2 Measure length using rulers marked with halves and fourths of an inch and the nearest whole centimeter; show data by making a line plot (3.MD.4)		Chapter 2.1, 2.2, 2.3, 2.4, 2.5, 2.6 Chapter 2.7
4	Data	4.DSP.1 Solve addition and subtraction problems using a line plot to display a data set of measurement in fractions of a unit (halves, fourths, and eighths) (4.MD.4)		Chapter 10.6, 12.5
5	Data	5.DSP.1 Use basic operations to solve problems using a line plot to display a data set of measurement in fractions of a unit (halves, fourths, and eighths) (5.MD.2)5.DSP.2 Find the mean, median, mode, and range of a given set of data		Chapter 9.1
Assessments		Written Assessments; Journal Entries; Class Discussions; Diagrams; Virtual Models		
6	Statistics and Probability	6.DSP.1 Develop understanding of statistical variability (6.SP.1,2,3) 6.DSP.2 Summarize and describe distributions (6.SP.4,5)		Chapter 12.1, 12.6, 13.1, 13.4, 13.6, 13.7, 13.8/Section 5.4, 5.5, 5.6, 5.6b Chapter 12.2, 12.3, 12.4, 12.5, 12.6, 12.7, 12.8, 13.1, 13.2, 13.3, 13.4, 13.5/Section 5.4, 5.5, 5.6, 5.6b
7	Statistics and Probability	7.DSP.1 Use random sampling to draw inferences about a population (7.SP.1,2) 7.DSP.2 Draw informal comparative inferences about two populations (7.SP.3,4) 7.DSP.3 Investigate chance processes and develop, use, and evaluate probability models (7.SP.5,6,7,8)		Section 8.1, 8.2, 8.3, 8.4, 8.4b Section 8.4b Section 9.1, 9.2, 9.3, 9.4
8	Statistics and Probability	8.DSP.1 Investigate patterns of association in bivariate data (8.SP.1,2,3,4)		Section 2.1, 7.1, 7.2, 7.3, 7.3b, 7.4
Assessments		Open-ended Projects and Problems; Written Assessments; Journal Entries; Class Discussions; Oral Reports; Visual and Virtual Models		