

This document outlines the academic goals, the activities and materials used in the Fourth Grade class in order to achieve high academic success. There is a great deal of overlap in the standards within the activities and within the core areas, thus, standards addressed repeatedly throughout the year.

| Time period | Standard | Resources (unit in textbook, learning center, recurring activity, other) | Internet/Media/ other resource |
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| 1 st Quarter Week 1 to 2 | (1) Number, operation, and quantitative reasoning. The student uses place value to represent whole numbers and decimals. The student is expected to: | enVision Math Common Core Grade 4 | |
| | (A) use place value to read, write, compare, and order whole numbers through 999,999,999; and | Topic 3: Lessons 1-5 | |
| | (B) use place value to read, write, compare, and order decimals involving tenths and hundredths, including money, using concrete objects and pictorial models. | Topic 3: Lesson 1-5 Topic 13: Lesson 7-9 | |
| 2 nd Quarter Week 6-9 | (2) Number, operation, and quantitative reasoning. The student describes and compares fractional parts of whole objects or sets of objects. The student is expected to: | Topic 11: lesson 4-7 | |
| | (A) use concrete objects and pictorial models to generate equivalent fractions; | Topic 11 | |
| | (B) model fraction quantities greater than one using concrete objects and pictorial models; | Topic 11 | |
| | (C) compare and order fractions using concrete objects and pictorial models; and | Topic 11 | |
| | (D) relate decimals to fractions that name tenths and hundredths using concrete objects and pictorial models. | Topic 13 | |

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| Quarter 1 Week 3 to 4 | (3) Number, operation, and quantitative reasoning. The student adds and subtracts to solve meaningful problems involving whole numbers and decimals. The student is expected to: | Topic 4: Lesson 1 - 6 | |
| | (A) use addition and subtraction to solve problems involving whole numbers; and | Topic 4: Lesson 1-5 | |
| | (B) add and subtract decimals to the hundredths place using concrete objects and pictorial models. | Not in envision Math Curriculum Use copies from Alternative Math textbook | |
| Quarter 1 Week 5-9 Quarter 2 Week 1-2 | (4) Number, operation, and quantitative reasoning. The student multiplies and divides to solve meaningful problems involving whole numbers. The student is expected to: | Topic 1: Lesson 1-10 Topic 5: Lesson 1-6 Topic 6: Lesson 1-6 Topic 7: Lesson 1-5 Topic 8: Lesson 1-5 Topic 9: Lesson 1-9 Topic 10: Lesson 1-8 | |
| | (A) model factors and products using arrays and area models; | Topics 1, 5, 6, 7, 8 Factors Lessons: 1.4, 11.1 | |
| | (B) represent multiplication and division situations in picture, word, and number form; | Topics 5, 6, 7, 8, 9 | |
| | (C) recall and apply multiplication facts through 12×12 ; | Topics 5, 6, 7, 8 | |
| | (D) use multiplication to solve problems (no more than two digits times two digits without technology); and | Topics 5, 6, 7, 8 | |
| | (E) use division to solve problems (no more than one-digit divisors and three-digit dividends without technology). | Topic 9, 10 | |
| Quarter 1 Week 2 - 9 | (5) Number, operation, and quantitative | Topic 3: Lesson 5 Topic 4: Lesson 2 | |

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| | reasoning. The student estimates to determine reasonable results. The student is expected to: | Topic 5: Lesson 4-5 Topic 7: Lesson 3-4 Topic 9: Lesson 9-2 | |
| | (A) round whole numbers to the nearest ten, hundred, or thousand to approximate reasonable results in problem situations; and | Topic 3: Lesson 5 Topic 4: Lesson 2 Topic 5: Lesson 4-5 | |
| | (B) use strategies including rounding and compatible numbers to estimate solutions to multiplication and division problems. | Topic 7: Lesson 3-4 Topic 9: Lesson 9-2 | |
| Quarter 1 Week 5 - 6 Quarter 2 Week 3 - 4 | (6) Patterns, relationships, and algebraic thinking. The student uses patterns in multiplication and division. The student is expected to: | Topic 1: Lesson 1-10 Topic 2: Lesson 1-6 Algebra Connections (inserted throughout) Topic 5: Lesson 1-2 | |
| | (A) use patterns and relationships to develop strategies to remember basic multiplication and division facts (such as the patterns in related multiplication and division number sentences (fact families) such as $9 \times 9 = 81$ and $81 \div 9 = 9$); and | Topic 1: Lesson 1-10 Topic 2: Lesson 1-6 | |
| | (B) use patterns to multiply by 10 and 100. | Topic 5: Lesson 1-2 | |
| Quarter 2 Week 5 | (7) Patterns, relationships, and algebraic thinking. The student uses organizational structures to analyze and describe patterns and relationships. The student is expected to describe the relationship between two sets of related data such as ordered pairs in a table. | Topic 2: Lesson 3 Problem Solving: Draw a Picture and Write an Equation Lesson 1.10, 4.6, 9.6, 12.11 | |

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| Quarter 4 Week 3 - 9 | (8) Geometry and spatial reasoning. The student identifies and describes attributes of geometric figures using formal geometric language. The student is expected to: | Topic 16: Lesson 1-11 | |
| | (A) identify and describe right, acute, and obtuse angles; | Topic 16: Lesson 3-5 Alternate Textbook Needed to cover this objective | |
| | (B) identify and describe parallel and intersecting (including perpendicular) lines using concrete objects and pictorial models; and | Topic 16: Lesson 1-2 Alternate Textbook Needed to cover this objective | |
| | (C) use essential attributes to define two- and three-dimensional geometric figures. | Topic 16: Lesson 7-11 Alternate Textbook Needed to cover this objective | |
| Quarter 4 Week 7 - 9 | (9) Geometry and spatial reasoning. The student connects transformations to congruence and symmetry. The student is expected to: | Alternate Textbook Needed to cover these objectives | |
| | (A) demonstrate translations, reflections, and rotations using concrete models; | | |
| | (B) use translations, reflections, and rotations to verify that two shapes are congruent; and | | |
| | (C) use reflections to verify that a shape has symmetry. | | |
| Quarter 1, 2, & 3 | (10) Geometry and spatial reasoning. The student recognizes the connection between numbers and their properties and points on a line. The student is expected to locate and name points on a number line using whole numbers, fractions such as halves and fourths, and decimals such as tenths. | Topic 11: Lesson 5 Topic 12: Lesson 5 Topic 13: Lesson 5 | |

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| Quarter 3 Week 4 - 8 | (11) Measurement. The student applies measurement concepts. The student is expected to estimate and measure to solve problems involving length (including perimeter) and area. The student uses measurement tools to measure capacity/volume and weight/mass. The student is expected to: | Topic 14: Lesson 1-11 Topic 15: Lesson 1-5 | |
| | (A) estimate and use measurement tools to determine length (including perimeter), area, capacity and weight/mass using standard units SI (metric) and customary; | Topic 14: Lesson 1 and 6 Topic 15: Lesson 1-2 | |
| | (B) perform simple conversions between different units of length, between different units of capacity, and between different units of weight within the customary measurement system; | Topic 14: Lesson 4 | Metric system used in lessons- Customary system only included in "Enrichment" section |
| | (C) use concrete models of standard cubic units to measure volume; | | Hands on activity not included in student text- perhaps included in teacher edition |
| | (D) estimate volume in cubic units; and | Alternate Textbook Needed to cover this objective | |
| | (E) explain the difference between weight and mass. | Topic 14: Lesson 8 | |
| Quarter 3 Week 9 | (12) Measurement. The student applies measurement concepts. The student measures time and temperature (in degrees Fahrenheit and Celsius). The student is expected to: | Alternate Textbook Needed to cover these objectives – Scott Foresman | |
| | (A) use a thermometer to measure temperature and changes in temperature; and | | |
| | (B) use tools such as a | | |

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| | clock with gears or a stopwatch to solve problems involving elapsed time. | | |
| Quarter 4 Week 1 - 2 | (13) Probability and statistics. The student solves problems by collecting, organizing, displaying, and interpreting sets of data. The student is expected to: | Alternate Textbook Needed to cover these objectives | |
| | (A) use concrete objects or pictures to make generalizations about determining all possible combinations of a given set of data or of objects in a problem situation; and | Introduced in Lesson 16.11 | |
| | (B) interpret bar graphs. | | |
| Quarter 1 - 4 | (14) Underlying processes and mathematical tools. The student applies Grade 4 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to: | Topics 1 - 16 | |
| | (A) identify the mathematics in everyday situations; | Throughout the book, word problems that use everyday situations | |
| | (B) solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness; | By use of estimating and reasonableness used | |
| | (C) select or develop an appropriate problem-solving plan or strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working | Topics 1-16- "Problem Solving" section | |

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| | backwards to solve a problem; and | | |
| | (D) use tools such as real objects, manipulatives, and technology to solve problems. | Topics 1-16- "Interactive Learning" and "Going Digital" sections | |

*Topic 12 (Adding and Subtracting Fractions) is not addressed by any of these standards