

Mitchell County Schools
2009-2010 Mathematics Pacing Guide
Eighth Grade

| | 1st Quarter | 2nd Quarter | 3rd Quarter | 4th Quarter |
|--|--|--|---|--|
| Number & Operations 10-15% | <p>1.01 Develop number sense for the real numbers. a. Define and use irrational numbers. b. Compare and order. c. Use estimates of irrational numbers in appropriate situations.</p> <p>1.02 Develop flexibility in solving problems by selecting strategies and using mental computation, estimation calculators or computers, and paper and pencil.</p> | | | <p>1.01 Develop number sense for the real numbers. a. Define and use irrational numbers. b. Compare and order. c. Use estimates of irrational numbers in appropriate situations.</p> |
| Measurement 10-15% | <p>2.01 Determine the effect on perimeter, area or volume when one or more dimensions of two-and three-dimensional figures are changed.</p> <p>2.02 Apply and use concepts of indirect measurement.</p> | | <p>2.01 Determine the effect on perimeter, area or volume when one or more dimensions of two-and three-dimensional figures are changed.</p> <p>2.02 Apply and use concepts of indirect measurement.</p> | |
| Geometry 10-15% | <p>3.01 Represent problem situations with geometric models.</p> | <p>3.02 Apply geometric properties and relationships, including the Pythagorean theorem, to solve problems.</p> <p>3.03 Identify, predict, and describe dilations in the coordinate plane.</p> | | <p>3.02 Apply geometric properties and relationships, including the Pythagorean theorem, to solve problems.</p> <p>3.03 Identify, predict, and describe dilations in the coordinate plane.</p> |

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|--|---|--|--|--|
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| Data, Probability and Statistics 20-25% | | | 4.01 Collect, organize, analyze, and display data (including scatter plots) to solve problems. 4.02 Approximate a line of best fit for a given scatter plot; explain the meaning of the line as it relates to the problem and make predictions. 4.03 Identify misuses of statistical and numerical data. | 4.01 Collect, organize, analyze, and display data (including scatter plots) to solve problems. 4.02 Approximate a line of best fit for a given scatter plot; explain the meaning of the line as it relates to the problem and make predictions. |
| Algebra 35-40% | 5.04 Solve equations using the inverse relationships of addition and subtraction, multiplication and division, squares and square roots, and cubes and cube roots. | 5.01 Develop an understanding of function. a. Translate among verbal, tabular, graphic, and algebraic representations of functions. b. Identify relations and functions as linear or nonlinear. c. Find, identify, and interpret the slope (rate of change) and intercepts of a linear relation. d. Interpret and compare properties of linear functions from tables, graphs, or equations. 5.02 Write an equation of a linear relationship given: two points, the slope and one point on the line, or the slope and y-intercept. 5.03 Solve problems using linear equations and inequalities; justify symbolically and graphically. 5.04 Solve equations using the inverse relationships of addition and subtraction, multiplication and division, squares and square roots, and cubes and cube roots. | 5.01 Develop an understanding of function. a. Translate among verbal, tabular, graphic, and algebraic representations of functions. b. Identify relations and functions as linear or nonlinear. c. Find, identify, and interpret the slope (rate of change) and intercepts of a linear relation. d. Interpret and compare properties of linear functions from tables, graphs, or equations. 5.02 Write an equation of a linear relationship given: two points, the slope and one point on the line, or the slope and y-intercept. | 5.03 Solve problems using linear equations and inequalities; justify symbolically and graphically. 5.04 Solve equations using the inverse relationships of addition and subtraction, multiplication and division, squares and square roots, and cubes and cube roots. |

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NCDPI On-line Resources for your use:

Strategies for Instruction - Book with activities for each math objective

<http://community.learnnc.org/dpi/math>

Click Instructional Resources

Part I Week -by- Week Essentials; Part II Classroom Strategies; Part III Indicators