PETERS TOWNSHIP SCHOOL DISTRICT

CORE BODY OF KNOWLEDGE
MATH
GRADE 2

For each of the sections that follow, students may be required to analyze, recall, explain, interpret, apply, or evaluate the particular concepts being taught.

This course focuses on Operations and Algebraic Thinking, Number and Operations in Base Ten, Measurement and Data, and Geometry concepts. Students will learn and use the 8 Standards for Mathematical Practices: make sense of problems and persevere in solving them, reason abstractly and quantitatively, construct viable arguments and critique the reasoning of others, model with mathematics, use appropriate tools strategically, attend to precision, look for and make use of structure, and look for and express regularity in repeated reasoning.

STUDY SKILLS

- Complete daily guided practice, independent practice, and problem solving to prepare for daily quizzes.
- Consistently complete daily homework to prepare for topic tests and performance assessments
- Integrate and apply previously learned skills for new topics.

UNDERSTANDING ADDITION AND SUBTRACTION

- Writing Addition Number Sentences
- Stories About Joining
- Writing Number Sentences
- Stories About Separating
- Stories About Comparing
- Connecting Addition and Subtraction
- Using Objects to Problem Solve

ADDITION STRATEGIES
- Adding 0, 1, 2
- Doubles
- Near Doubles
- Adding in Any Order
- Adding Three Numbers

- Making 10 to Add
- Drawing a Picture and Writing a Number Sentence to Problem Solve

SUBTRACTION STRATEGIES
- Subtracting 0, 1, 2
- Thinking Addition to Subtract Doubles
- Thinking Addition to 10 to Subtract
- Thinking Addition to 18 to Subtract
- Making 10 to Subtract
- Answering Two-Question Problems when Problem Solving

WORKING WITH EQUAL GROUPS
- Repeated Addition
- Building Arrays
- Practicing Repeated Addition
- Drawing a Picture and Writing a Number Sentence to Problem Solve

PLACE VALUE TO 100
- Models for Tens and Ones
- Reading and Writing Numbers
- Using Symbols to Compare Numbers
- Counting to 100
- 10 More or 10 Less
- Even and Odd Numbers
- Using Data from a Chart to Problem Solve

MENTAL ADDITION
- Adding Tens
- Adding Ones
- Adding Tens and Ones
- Adding on a Hundred Chart
- Adding Multiples of 10
- Looking for a Pattern to Problem Solve

MENTAL SUBTRACTION
- Subtracting Tens
- Finding Parts of 100
- Subtracting on a Hundred Chart
- Subtracting Tens and Ones

- Finding Missing or Extra Information to Problem Solve

ADDING TWO-DIGIT NUMBERS
- Regrouping 10 Ones for 1 Ten
- Models to Add Two- and One-Digit Numbers
- Adding Two- and One-Digit Numbers
- Models to Add Two-Digit Numbers
- Adding Two-Digit Numbers
- Adding on a Number Line
- Adding More than Two Numbers
- Ways to Add
- Drawing a Picture and Writing a Number Sentences to Problem Solve

SUBTRACTING TWO-DIGIT NUMBERS
- Regrouping 1 Ten for 10 Ones
- Models to Subtract Two- and One-Digit Numbers
- Subtracting Two- and One-Digit Numbers
- Models to Subtract Two-Digit Numbers
- Subtracting Two-Digit Numbers
- Subtracting on a Number Line
- Using Addition to Check Subtraction
- Ways to Subtract
- Answering Two-Question Problems when Problem Solving

PLACE VALUE TO 1,000
- Building 1,000
- Counting Hundreds, Tens, and Ones
- Reading and Writing Numbers to 1,000
- Changing Numbers by Hundreds and Tens
- Patterns with Numbers on Hundreds Charts
- Skip Counting by 5, 10, 100 to 1,000
- Comparing Numbers
- Looking for a Pattern to Problem Solve

THREE-DIGIT ADDITION AND SUBTRACTION
- Exploring Adding Three-Digit Numbers
- Mental Math
- Estimating Sums
- Models for Adding Three-Digit Numbers

- Adding Three-Digit Numbers
- Exploring Subtracting Three-Digit Numbers
- Mental Math: Ways to Find Missing Parts
- Estimating Differences
- Models for Subtracting with Three-Digit Numbers
- Subtracting Three-Digit Numbers
- Using Logical Reasoning to Problem Solve

GEOMETRY
- Flat Surfaces, Vertices, and Edges
- Related Plane Shapes to Solid Figures
- Polygons and Angles
- Wholes and Equal Parts
- Dividing Rectangles into Equal Squares
- Equal Shares, Different Shapes
- Using Reasoning to Problem Solve

COUNTING MONEY
- Coins
- Counting Collections of Coins
- Ways to Show the Same Amount
- One Dollar
- Making an Organized List to Problem Solve

MONEY
- Adding Money
- Subtracting Money
- Estimating Sums and Differences
- Try, Check and Revise to Problem Solve

MEASURING LENGTH
- Exploring Length
- Inches
- Centimeters
- Inches, Feet, and Yards
- Centimeters and Meters
- Measuring Length
- Adding and Subtracting in Measurement
- Comparing Lengths

- Using Objects to Problem Solve

TIME, GRAPHS, AND DATA
- Telling Time to Five Minutes
- Telling Time Before and After the Hour
- Organizing Data
- Graphing Lengths
- Pictographs
- Using a Graph to Problem Solve

MATERIALS
- enVision Math Common Core- Realize Edition
- Pearson Realize http://www.pearsonrealize.com/

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