

E2 (Math for Grade 2)

Course Curriculum (MPSL Academy)

Each Session: 1 hour 15 minutes

(First 10 min review of last week topics/HW, 50 min new topics, 15 min critical thinking Qs)

1. Numbers and Arrays

- Even and Odd Numbers
- Model Even and Odd Numbers
- Equal Groups
- Use Arrays
- Make Arrays

2. Fluency and Strategies within 20

- Add in Any Order
- Use Doubles
- Add Three Numbers
- Make a 10 to Add
- Count On and Count Back to Subtract
- Relate Addition and Subtraction
- Get to 10 to Subtract
- Practice Addition and Subtraction
- Problem Solving: Addition and Subtraction

3. Addition to 100 Strategies

- Add Tens Using a Number Line
- Add Tens and Ones Using a Number Line
- Use Place Value to Add
- Decompose to Add Tens and Ones
- Use Compensation to Add
- Practice Addition Strategies

4. Fluently Add within 100

- Use Partial Sums to Add
- More Partial Sums
- Regroup to Add
- Add Two-Digit Numbers
- Practice Adding Two-Digit Numbers
- Add Up to 3 Two-Digit Numbers
- More Problem Solving: Addition

5. Subtraction to 100 Strategies

- Subtract Tens Using a Number Line
- Subtract Tens and Ones Using a Number Line
- Use Addition to Subtract
- Decompose to Subtract
- Decompose to Subtract Tens and Ones
- Use Compensation to Subtract
- Practice Subtraction Strategies
- Problem Solving: Subtraction

6. Fluently Subtract within 100

- Model and Regroup to Subtract
- Use Models to Subtract a One-Digit Number from a Two-Digit Number
- Use Models to Subtract Two-Digit Numbers
- Subtract from a Two-Digit Number
- Use Addition to Check Subtraction
- Practice Two-Digit Subtraction
- More Problem Solving: Subtraction

7. Understand Place Value to 1,000

- Hundreds

- Model Numbers to 1,000
- Understand Place Value
- Write Three-Digit Numbers
- Represent Numbers in Different Ways

8. Count and Compare Numbers to 1,000

- Count to 120 in Different Ways
- Count to 1,000 in Different Ways
- Place Value Patterns
- Find More or Less
- Compare Numbers Using Symbols
- Compare Numbers Using a Number Line

9. Add Numbers within 1,000

- Add 10 and 100
- Use a Number Line to Add Hundreds and Tens
- Use a Number Line to Add Three-Digit Numbers
- Use Compensation to Add Three-Digit Numbers
- Use Partial Sums to Add Three-Digit numbers
- Use Models to Add Three-Digit Numbers
- Add Three-Digit Numbers
- Add Up to 4 Two-Digit Numbers
- Explain Addition Strategies

10. Subtract Numbers within 1,000

- Subtract 10 and 100
- Use a Number Line to Subtract Hundreds and Tens
- Use a Number Line to Subtract Three-Digit Numbers
- Use Compensation to Subtract Three-Digit Numbers
- Use Models to Subtract Three-Digit Numbers

- Subtract Three-Digit Numbers
- Subtract from Numbers That Contain Zeros
- Use Addition to Subtract
- Explain Subtraction Strategies

11. Measure and Estimate Lengths

- Measure Lengths in Centimeters
- Measure Objects Using Metric Length Units
- Estimate Lengths in Metric Units
- Measure Lengths in Inches
- Measure Objects Using Customary Length Units
- Estimate Lengths in Customary Units
- Measure Objects Using Different Length Units
- Measure and Compare Lengths

12. Solve Length Problems

- Use a Number Line to Add and Subtract Lengths
- Problem Solving: Length
- Problem Solving: Missing Measurement
- Practice Measurement Problems

13. Represent and Interpret Data

- Sort and Organize Data
- Read and Interpret Picture Graphs
- Make Picture Graphs
- Read and Interpret Bar Graphs
- Make Bar Graphs
- Make Line Plots
- Measure Objects and Make Line Plots

14. Money and Time

- Find Total Values of Coins and Bills
- Order to Find Total Values of Coins
- Show Money Amounts in Different Ways
- Make Change from One Dollar
- Tell Time to the Nearest Five Minutes
- Tell Time Before and After the Hour
- Relate A.M. and P.M.

15. Identify and Partition Shapes

- Describe Two-Dimensional Shapes
- Identify Angles of Polygons
- Draw Polygons
- Identify and Draw Cubes
- Compose Rectangles
- Identify Two, Three, or Four Equal Shares
- Partition Shapes into Equal Shares and Analyze them

16. ADVANCE TOPICS

- PLACE VALUE, PICTURE GRAPHS
- CALENDAR – INTRO
- INTRO – DIVISION & SHAPES, DIVISION 1, 2,3,4,5
- MULTIPLICATION/DIVISION BY 2 AND 3
- VENN DIAGRAM
- GEOMETRY – INTRO

NOTE: STUDENTS WILL PARTICIPATE IN VARIOUS STATE LEVEL MATH COMPETITIONS LIKE MATHCOUNT, MATH OLYMPIAD, MATH KANGAROO, CONTINENTAL MATH LEAGUE AND SO ON. OUR GOAL IS TO BUILD CONFIDENCE IN MATH IN AN EFFICIENT WAY RESULTING IN IMPROVING SCORES IN SCHOOL EXAM & SUCCEED IN NATIONAL MATH COMPETITIONS.