

KMIND GRADE 2 MATH CLASS OUTLINE

OVERVIEW OF CALIFORNIA STATE STANDARDS OF MATH:

OPERATIONS AND ALGEBRAIC THINKING

- Represent and solve problems involving addition and subtraction.
- Add and subtract within 20.
- Work with equal groups of objects to gain foundations for multiplication.

NUMBER AND OPERATIONS IN BASE TEN

- Understand place value.
- Use place value understanding and properties of operations to add and subtract.

MEASUREMENT AND DATA

- Measure and estimate lengths in standard units.
- Relate addition and subtraction to length.
- Work with time and money.
- Represent and interpret data.

GEOMETRY

- Reason with shapes and their attributes.

FOUNDATIONAL MATHEMATICAL PRACTICES:

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



LIST OF MATH TOPICS/SKILLS WILL BE COVERED IN CLASS

(30-40 SESSIONS TOTAL BASED ON CLASS SIZE AND DURATION OF CLASS):

OPERATIONS & ALGEBRAIC THINKING COVERING THESE SKILLS:

- Addition word problems
- Subtraction word problems
- Addition within 20
- Subtraction within 20
- Adding 3 numbers
- Odd & even numbers
- Arrays and repeated addition

PLACE VALUE COVERING THESE SKILLS:

- Understanding Tens and Ones
- Hundreds, Tens, Ones
- 3-Digit Numbers
- Understanding Place Value
- Skip Counting by 10s
- Skip Counting by 100s
- Mixed Skip Counting
- Read & Write Numbers to 1000
- Reading & Writing 3-Digit Numbers
- Different Forms of Numbers
- Comparing Numbers
- Ordering Numbers
- 2-Digit Addition without regrouping
- 2-Digit Addition with regrouping
- 2-Digit Subtraction without regrouping



- 2-Digit Subtraction with regrouping
- Mixed 2-Digit Addition & Subtraction
- Make a New Ten
- Adding Multiple 2-Digit Numbers
- 3-Digit Addition
- 3-Digit Subtraction
- Mental Addition & Subtraction
- Adding Hundreds, Tens, and Ones
- Addition & Place Value
- Subtraction & Place Value
- Place Value Properties

2-DIGIT & 3-DIGIT ADDITION & SUBTRACTION COVERING THESE SKILLS:

- 2-Digit Addition without regrouping
- 2-Digit Addition with regrouping
- Adding Multiple 2-Digit Numbers
- 2-Digit Addition Word Problems
- 2-Digit Subtraction without regrouping
- 2-Digit Subtraction with regrouping
- 2-Digit Subtraction Word Problems
- Mixed 2-Digit Addition & Subtraction with and without regrouping
- 3-Digit Addition without regrouping
- 3-Digit Addition with regrouping
- 3-Digit Addition Word Problems
- 3-Digit Subtraction without regrouping
- 3-Digit Subtraction with regrouping
- 3-Digit Subtraction Word Problems
- Mixed 3-Digit Addition & Subtraction with and without regrouping

MEASUREMENT, TIME, MONEY, DATA/GRAPHING COVERING THESE SKILLS:

- Measurement tools
- Metric measurement tools
- Using inches or feet
- Measuring in inches
- Measuring in centimeters
- Measuring units
- Measuring twice
- Measuring twice with nonstandard units
- Centimeters vs. inches
- Estimating yards
- Estimating meters
- Estimating inches
- Comparing measurements
- Comparing lengths
- Measurement word problems
- Addition and subtraction in length
- Using number lines
- Number line addition to 10
- Number line addition and subtraction
- Telling time to 5 minutes
- AM or PM
- Analog and digital clocks
- Counting money
- Money word problems
- Coin values
- Coin counting



- Coin addition & subtraction
- Line plots
- Plotting measurements
- Measurement data & line plots
- Graphs
- Creating bar graphs
- Reading bar graphs
- Reading picture graphs
- Data

GEOMETRY COVERING THESE SKILLS:

- 2-D Shapes
- Quadrilaterals
- 2-D Shape Names
- Attributes of 2-D Shapes
- 3-D Shapes
- Recognizing Solid Figures
- Attributes of Solid Figures
- Recognizing Shape Attributes
- Geometry Mini Book for each shape
- Partitioning Shapes
- Fractions
- Equal Parts
- Identifying Fractions

*Skills will be modified and adjusted based on student's needs and ability

MAIN ACTIVITIES FOR EACH SESSION:

- Mini-lessons on math skills and in-depth discussion based on “I do- we do- you do” methodology
- Various practice activities including but not limited to Beast Academy, Boom card, high quality and engaging worksheets, and other interactive games
- Using math skills to solve word problems and enhancing problem-solving skills
- Taking math to real-life practice through multi-disciplinary method (conversational practice and critical thinking skills)
- Growth-mindset, math talk, and logic puzzles will also be implemented throughout the sessions