RSU 26 Curriculum Map

Content Area: Math Grade Level: 3

Priority Standards and Essential Questions for Course:

Solve mathematical ***word problems*** using a variety of strategies including:

- **Use place value understanding to round whole numbers to the nearest 10 or 100**
  - How does estimating help you to check your work?
  - When is it better to estimate than to find the exact answer?
  - How does the digit's place affect its value?

- Addition and subtraction within 1,000
  - How does being able to use different strategies for adding and subtracting help you be a better mathematician?

- Multiplication and division within 100
  - How does being able to use different strategies for multiplying and dividing help you be a better mathematician?

- Visually Identifying and comparing fractions (with denominators of 2, 3, 4, 6, and 8) within shapes and on number lines.
  - Why are there numbers between whole numbers?
  - What does the top and bottom number tell us about a fraction?
  - How do you know when a fraction is smaller, equal to, or bigger than a whole?

- Telling time to the nearest minute
  - What are some different ways to measure time?
  - How do we decide how precise we need to be when we measure time?

- Measuring length to the nearest ½ and ¼ inch

    - What are some different ways to measure length?
    - How do we decide how precise we need to be when we measure length?
    - Why are there numbers between whole numbers?

- Determining the perimeter and area of polygons and rectilinear figures
    - How are perimeter and area different?
    - When does knowing the perimeter of a shape help us?
    - When does knowing the area of a shape help us?

- Describe, analyze, and partition two-dimensional shapes with an emphasis on quadrilaterals
    - What makes something a shape?
    - How do we describe polygons?
    - What are ways we can compare and contrast polygons?

- Make and interpret graphs (pictograph, bar, line plot, scaled)
    - What are some ways to collect, organize, and display data?
    - How do we use graphs to understand the world around us?

Higher Order Thinking Skills: Apply, Analyze, Evaluate, Create

Dispositions: I can persevere. I can take responsible risks. I can strive for accuracy. I can think flexibly. I can manage my impulses.

Technology Skills: Use technology independently and with peers responsibly, and make safe choices. Use technology resources and tools to solve age-appropriate computing problems or for independent learning.

Cultural Inclusiveness and Representation: Knowing our students each year helps to incorporate opportunities to represent cultural identities and bring diversity to our math curriculum. Through utilizing different modalities of learning and hands-on challenges presented in each unit, students will have windows and mirrors that reflect and honor the evolving diversity of our classrooms. Everyday Math also uses diverse names.

Primary Instructional Resource: Everyday Mathematics (EDM)

Unit of Instruction: Unit 1 - Math Tools, Time, and Multiplication

Consider teaching the Hands on Challenge/Active Learning Activities to a heterogeneous group of students. This would provide a time for the students to work with a different teacher in that grade level. For example, a teacher would teach the Hands on Challenge to all students in a different homeroom.

Hands on Challenge:

Lesson 1-6: Make a clock and figure out how long the school morning is.
Time physical activities (ie How long does it take to do 100 jumping jacks?)

With Lesson 1-7: Make bar graphs based on student interests or questions. Use technology to help organize and display the data.

Anticipated Time Frame: September

Content Concepts and Skills
I can use tools to find the difference between two two-digit numbers.
I can round numbers to the nearest 10 or 100.
I can tell time to the nearest minute and solve word problems involving time.
I can make and interpret a bar graph.
I can solve multiplication problems with 2s, 5s, and 10s.
I can solve multiplication number stories.

Unit of Instruction: Unit 2 - Number Stories and Arrays

Hands on Challenge: Pose real life classroom-based scenarios using the number of students in our class, pictures and/or counters to make equal groups. (For example we have 4 centers, how many students would be at each center?)

Anticipated Time Frame: October- November

Content Concepts and Skills
I can add, subtract, and solve word problems within 100.
I can use arrays and pictures to solve multiplication and division word problems.

Unit of Instruction: Unit 3 - Operations

Hands on Challenge: Have the students design a pictograph and write three questions that would require their classmates to use addition and/or subtraction to answer.

Anticipated Time Frame: December

Content Concepts and Skills
I can add 3-digit numbers and subtract 3-digit numbers within 1,000.
I understand the relationship between addition and subtraction.
I can round numbers to the nearest 10 or 100.
I can make and interpret a pictograph.

Unit of Instruction: Unit 4 - Measurement and Geometry

Hands on Challenge:

Lesson 6-5: Exploring Geometry Problems, Measurement Data, and Polygons (Goes with lesson 4-4 and 4-5)

Anticipated Time Frame: January-February

Content Concepts and Skills
I can measure to the nearest ½ inch.
I can organize data on a line plot.
I can describe a quadrilateral.
I can find the perimeter and area of a polygon.
I can find the area of a rectilinear figure.

Unit of Instruction: Unit 5 - Fractions and Multiplication Strategies

Hands on Challenge: Use Twizzlers, chocolate bars, pizza, gum, to divide evenly.

Anticipated Time Frame: March

Content Concepts and Skills
I can represent fractions with pictures, words, and numbers.
I can find equivalent fractions using shapes.
I can multiply using a variety of strategies such as doubling, multiplication squares, patterns in products, & breaking apart factors.

Unit of Instruction: Unit 6 - More Operations

Hands on Challenge:

Lesson 6-9: Writing Number Stories (Consider acting out the stories instead of writing them).

Anticipated Time Frame: March/April

Content Concepts and Skills
I can subtract multi-digit numbers within 1,000.
I can use the order of operations to solve number sentences with parentheses.
I can use doubling within the break apart strategy to solve multiplication facts.
I can write number models and solve 2-step number stories.

Unit of Instruction: Unit 7 - Fractions

Hands on Challenge:

Use paper plates and paper shapes of food to divide equally for a picnic. For example, share 3 oranges, 6 sandwiches, and one rectangular cake with 4 people.

Anticipated Time Frame: May

Content Concepts and Skills
I can compare fractions using fraction strips or number lines.
I can find equivalent fractions using fraction circles, fraction strips, or number lines.
I can record fraction comparisons with <, >, =.
I can represent and locate fractions on a number line.

Unit of Instruction: Unit 8 - Multiplication and Division

Hands on Challenge: Make an art drawing where every straight edge is to the nearest ¼ inch.
Or do a scavenger hunt, with the students finding objects that are ¼ inch, ½ inch, 1 inch, 7 ¾ inches, etc. Have students make a line plot showing what they found.

Anticipated Time Frame: June

Content Concepts and Skills
I can measure lengths of objects to the nearest ¼ inch.

Unit of Instruction: Unit 9 - Multi Digit Operations

Hands on Challenge: Design a board game that will help next year's 3rd grade mathematicians practice their math skills.

Anticipated Time Frame: June - Time Permitting