

Unit Title: Place Value

Grade Level: 5th Grade

Subject Area: Mathematics

Duration/Length/Number of class periods: 10 days

Description:

Students will be able to analyze real world situations using mathematical methods. Students will be able to apply their knowledge of place value and see various strategies including the inverse relationship, powers of 10, the use of technology, and the context of a problem to assess the reasonableness of results.

Established Goals

MN State Standards

5.1.1.4 Solve real world and mathematical problems requiring addition, subtraction, multiplication, and division of multi-digit whole numbers.
5.1.2.5 Round numbers to the nearest 0.1, 0.01, and 0.001.

ITSE Student Standards

3c. encourage information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.

3d. build knowledge by actively exploring real-world issues and problems; developing ideas and theories and pursuing answers and solutions.

What Enduring Understandings are desired?

- Solving problems mathematically is done by applying real world application.
- Number sense develops through experiences.

What Essential Questions will be considered? 3-4 questions.. why? how?

Why is the understanding of place value essential to solving real world problems?

How can we use place value when shopping in the stores?

Why do you need to know how numbers relate to each other in professional careers?

Students will know / be able to:

Understand the relationship from place values from one millionth to one million.

Round numbers to the nearest 0.1, 0.01, and 0.001.

Multiply by multi digit numbers
 Apply place values to real world applications.
 Students will be able to identify how professionals use number relationships in their daily jobs.

Description	Formative	Summative	Introductory Activity	Learning Activity	Student Technology Used	Teacher Technology Used	ISTE Standards
Day 1: Introduction to Place Value, Multiplication, and Expressions							
- Investigating Place Value and Patterns Video			X			X	
- Students will take Ch. 1 Pretest on ThinkCentral.	X				X		
Day 2: Place Value of Whole Numbers							
- Review Base Ten blocks and their properties.				X			
- Review lesson 1.1 in textbook filling in charts and graphs				X			
- Assign Lesson 1.1 Homework on ThinkCentral.	X				X		
- Students make a FlipgGrid video reflecting what they learned today.					X		X
Day 3: Algebra-Properties							
- Have students watch my flipped learning video on <i>Properties</i> independently.			X		X	X	X
- Students review Lesson 1.2 independently.				X			
- Students will create a Google Drawing that includes: - Name 4 properties - Definition of 4 properties - Examples of <u>each</u> property.	X			X	X		X
Day 4: Powers of 10							
- Using manipulatives, review Lesson 1.4 in textbook as whole group				X			
- Each person will create interview questions about Powers of 10. - They will design their questions around how powers of 10 work, provide examples, and how they can use them in the real world.	X				X		X
Day 5: Mid-Chapter Check-in/Review							
- Students will take the exit ticket google form.		X			X	X	
Day 6: Patterns of Multiplications							

- Review Lesson 1.5 in Textbook and work through 1.5 Worksheets as whole group.				X			
- Have students watch 1.5PMT Interactive Student Edition Independently				X			
- Students will do 1.5 Homework questions on ThinkCentral.	X				X		
Day 7: Multiply by 1-Digit Numbers							
- Interactive SmartBoard Lesson-Whole group.			X			X	
- Students play multiplication board game with a partner				X			
- Students record a FlipGrid video reflecting on how the steps to multiply a three digit number by a 1 digit number and provide examples of how they will use this method in the real world.	X						X
Day 8: Relationship between Multiplication and Division							
- Introduce kids to Xtra math app. Review single digit multiplication facts.			X				
- Have students use google to research ways that multiplication and division are related.				X	X		
- Whole group discussion and examples of how multiplication and division is related.				X			
- Assign Lesson 1.8 Homework on Think Central	X				X	X	
Day 9: Numerical Expressions							
- Have students watch my flipped learning video on Expressions independently.			X			X	
- Students review Lesson 1.9 independently.				X			
- Students will create a Canva postcard highlighting numerical expressions with definitions and examples.	X				X	X	X
Day 10 Unit Review/Assessment/Reflection							
- Students will spend 20-30 minutes reviewing the postcards, videos, and assignments they have done throughout this unit. They can use this time to ask me questions and practice these concepts on IXL.				X	X	X	
- Students will take End of Chapter test on ThinkCentral		X			X		
- Students will make a 3-5minute video highlighting the following information. They will add this to their <u>Video Reflection Blog</u> on their <u>Google Site</u> . - 3 things they have learned from this chapter. - Why place value is important and how they will use these skills in the real world. - Self-assessment of how well they understand place value.		X			X	X	X

Materials, tools and resources:

Go Math Textbook Volume 1

Think Central Online-Student resources

Base ten blocks

Hands on manipulatives-money.

Pencils

Graph paper

Unit Plan Author Amy Hanzlicek. Medford Elementary. [Hanzlicek's Homeroom Website](#)