

Subject Area: Mathematics
Unit Title: Solving Real-World Problems Using Three-Digit Subtraction with Regrouping
Grade Level: 4th Grade
Lesson Number: 1 of 4

Duration: 60 minutes
Date: [Insert Date]
Teacher: [Insert Teacher's Name]
Room: [Insert Room Number]

Curriculum Standards Alignment

Content Standards:

- 4.NBT.4: Fluently add and subtract multi-digit numbers using the standard algorithm.
- 4.OA.3: Solve multi-step word problems posed with whole numbers and having whole-number answers using the four operations.

Skills Standards:

- Reasoning and Problem-Solving
- Communication
- Critical Thinking

Cross-Curricular Links:

- Language Arts: Reading Comprehension
- Science: Measurement and Data

Essential Questions & Big Ideas

Essential Questions:

- How can we use three-digit subtraction with regrouping to solve real-world problems?
- What are some everyday scenarios where subtraction is used?

Enduring Understandings:

- Subtraction is used to find the difference between two numbers.
- Regrouping is a strategy used to subtract multi-digit numbers.

Student Context Analysis

Class Profile:

- Total Students: 25
- ELL Students: 5
- IEP/504 Plans: 3
- Gifted: 2

Learning Styles Distribution:

- Visual: 40%
- Auditory: 30%
- Kinesthetic: 30%

Introduction and Hook

Welcome to our math adventure, where we will explore the exciting world of three-digit subtraction with regrouping! In this lesson, we will delve into the world of real-world problems, using everyday scenarios to make learning fun and engaging.

To hook our students' attention, we will begin with a relatable example, such as calculating the remaining balance in a piggy bank after a withdrawal. This will not only grab their attention but also highlight the importance of subtraction in our daily lives.

Lesson Objectives

Lesson Objectives:

- Apply three-digit subtraction with regrouping to solve real-world problems.
- Analyze the importance of subtraction in everyday life.
- Evaluate the effectiveness of different strategies for solving three-digit subtraction problems.
- Create their own real-world problems involving three-digit subtraction with regrouping.

Direct Instruction

Provide direct instruction on the concept of regrouping, using visual aids such as base-ten blocks or hundreds charts to demonstrate the process.

Use a step-by-step approach, explaining each stage of the subtraction process, from regrouping to calculating the final answer.

Ensure that students understand the concept of borrowing and paying back, using simple language and examples to support their understanding.

Guided Practice

Distribute worksheets with simple three-digit subtraction problems, and have students work in pairs to solve them.

Circulate around the room, providing guidance and support as needed, and encouraging students to use visual aids to help them solve the problems.

Use this opportunity to assess students' prior knowledge and understanding of three-digit subtraction with regrouping.

Independent Practice

Provide students with a set of real-world problems, such as calculating the cost of items at a store or determining the remaining time until a favorite TV show starts.

Have students work independently, using the skills they have learned to solve the problems.

Encourage students to use visual aids and to show their working, providing a clear and concise solution to each problem.

Transition and Engagement

To transition to the next section of the lesson, use a fun and interactive strategy, such as a math game or a puzzle.

This will not only engage students but also provide an opportunity for them to apply their knowledge in a fun and challenging way.

Conclusion and Assessment

Conclude the lesson by reviewing the key concepts learned, using visual aids and real-life scenarios to reinforce students' understanding.

Assess students' knowledge by collecting their worksheets and reviewing their solutions to the real-world problems.

Provide feedback and encouragement, highlighting areas of strength and weakness, and providing opportunities for further practice and review.

Extension Activity

Provide students with an extension activity, such as creating their own real-world problem involving three-digit subtraction with regrouping.

Encourage students to use visual aids and to show their working, providing a clear and concise solution to the problem.

Allow students to share their problems with the class, providing an opportunity for peer feedback and discussion.

Assessment and Feedback

Observe students during the guided and independent practice activities, noting their ability to apply three-digit subtraction with regrouping to real-world problems.

Collect and review students' worksheets, assessing their understanding of the concept and their ability to solve problems accurately.

Use the assessment data to inform future instruction, providing additional support or challenges as needed.

Reflection Questions

How effectively did I assess students' prior knowledge and understanding of three-digit subtraction with regrouping?

What strategies can I use to differentiate instruction and provide additional support for students who struggled with the concept of regrouping or applying it to real-world problems?

How can I ensure that all students have access to the resources and support they need to succeed?

Conclusion and Next Steps

In conclusion, solving real-world problems using three-digit subtraction with regrouping is an essential math skill that 4th-grade students need to master.

By following this lesson plan, teachers can provide their students with a comprehensive and engaging learning experience that covers the key concepts and skills required.

The use of real-world problems, visual aids, and interactive activities can help students to develop a deep understanding of the math concepts and apply them to everyday situations.

Next Steps

Lesson 2: Multi-Digit Subtraction with Regrouping

Lesson 3: Word Problems Involving Multi-Step Subtraction

Lesson 4: Real-World Applications of Subtraction