

# SUBTRACTION OF WHOLE NUMBERS INVOLVING 3 OR MORE DIGITS

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# **Subject**

Mathematics

# **Prepared By**

[Instructor Name]

#### **Grade Level**

4

## **Overview**

This lesson plan covers teaching content for;

- 1. Subtraction of whole numbers involving 3 or more digits.
- 2. Word problems relating to addition of whole numbers involving 3 or more digits.

## **Objectives**

Students should be able to;

- 1. Subtract whole numbers involving 3 or more digits.
- Solve word problems relating to addition of whole numbers involving 3 or more digits.

#### **Activity Starter/Instruction**

- 1. Revise subtraction of 2 digit numbers that do not involve "borrowing" e.g. 85 20, etc.
- 2. Present these problems as a mental activity i.e. pupils should not be using any resources to solve these problems.
- 3. Now present a few problems that involve borrowing e.g. 85 29, etc. This time allow pupils to use pen and paper to solve the problems.
- Do only a few of these so that you do not use too much of the lesson time.
   Recommended: 10 minutes' maximum.

#### **Guided Practice**

### Day 2/ Lesson 2: 15 Mins

- Work through examples with the class by asking them to identify the digits in a particular place values for numerical examples.
- 2. Using prepared examples, show students how to line up place values.

### **Teacher Guide**

#### Day 1/ Lesson 1: 15 Mins

- Make sure that they understand how to subtract a larger number from a smaller one.
   You can use apparatus, like an abacus, to assist understanding.
- Pay particular attention to what should be done if there are zeros on the top line when they need to exchange.
- 3. You may need to show the class how to do this, establishing that 1 000 = 900 + 90 + 10, and that 10 000 = 9 000 + 900 + 90 + 10.
- 4. Make sure that the pupils understand that, in these cases, exchanging means that zeros become 10, and then 9 as they are exchanged again to the next column.
- Remind them again about lining up the digits correctly, especially when dealing with numbers of different lengths.

# Materials Required

- Workbook
- Counters or number lines
- Abacus

#### Additional Resources

- https://www.khanacademy.org/math/arithmetic/arith
- https://www.youtube.com/watch?v=yCGgmnMT21Q
- https://www.google.com/imgres?imgurl=http%3A%2 games.jpg&imgrefurl=http%3A%2F%2Ffinleybegum.cl numbers%2F&docid=olVRxnDxG7KZ0M&tbnid=4zbbh
- https://www.google.com/search?q=how+to+subtract

### Additional Notes

- 3. Discuss the concept of borrowing and using prepared examples, teacher will show students how to borrow.
- Introduce students to subtraction and the term, difference. The class will work though basic examples that contain the borrowing of numbers.

#### **Guided Practice**

## Day 4/ Lesson 4: 15 Mins

- 1. Revise subtraction of 2 digit numbers that do not involve "borrowing" e.g. 85 20, etc.
- 2. Present these problems as a mental activity i.e. pupils should not be using any resources to solve these problems.
- 3. Now present a few problems that involve borrowing e.g. 85 29, etc. This time allow pupils to use pen and paper to solve the problems. Do only a few of these so that you do not use too much of the lesson time. Recommended: 10 minutes maximum.
- Make sure that they understand how to subtract a larger number from a smaller one.
   You can use apparatus, like an abacus, to assist understanding.

# **Guided Practice**

## Day 3/ Lesson 3: 15 Mins

- 1. Explain that, to find the answers to word problems, pupils need to work out whether they need to add or subtract, or both.
- 2. They need to look for clues that are in the question, for example, 'find the total' and 'altogether' mean addition, while 'how many more', 'less' and 'change from' all mean subtraction.
- 3. Give the pupils some word problems of your own and ask them to decide which operation they would need to use to solve them.

Assessment Activity  1. Check to make sure that pupils understand how to complete 3-digit subtraction with exchanging.	Assessment Activity Check that pupils understand how to correctly interpret and order word problems.
<ul><li>Summary</li><li>1. Ask for volunteers to share their answers to the problems assigned.</li><li>2. As the problems are reviewed in front of the class, have the students check their answers for accuracy.</li></ul>	