

AI Lesson Plan					
Grade	4 grade	Subject	Math	Class duration (min)	45 minutes
Unit	Unit 1: Know up to the number 10,000				
Objetivo(s) de Aprendizaje (OA) MINEDUC	<p>OA 7: Solve routine and non-routine problems in everyday contexts involving money, selecting, and using the appropriate operation.</p> <p>Evaluation Indicators:</p> <ul style="list-style-type: none"> • Select the operation and strategy for solving a problem. • They solve problems that require subtractions. • Solve routine and non-routine problems that require addition, subtraction, multiplication or division, using money on some of them. • They solve problems whose resolution requires a combination of operations <p>*My mentor teacher told me only to review addition, subtraction, and multiplication because she wants a whole class to review division, beside that I included division because that is the complete objective, but I will not do it in my video and actual class.</p> <p>*My mentor teacher prefers more practice than to do and end of class assessment, that is why I think I will not have the chance to do my exit ticket, but I planned it just in case and because you asked for it.</p>				

CLASS LESSON PLAN	
Class objective (CLIL)	Students will be able to solve math word problems using the four operations (addition, subtraction, multiplication, and division) by using the specific vocabulary and key words (addition, subtraction, multiplication, division, the key words of each operation)
End of class assessment	
Exit ticket <ul style="list-style-type: none"> Read the following word problem and answer to the following two questions: <p>A ream contains 500 sheets of paper, how many sheets are in 4 reams?</p> <ol style="list-style-type: none"> Which type of the four operations you must use to be able to solve the problem? Solve the problem and write the answer of it: 	
Expected answer (for end of class assessment)	
Exit ticket <ul style="list-style-type: none"> Read the following word problem and answer to the following two questions: <p>A ream contains 500 sheets of paper, how many sheets are in 4 reams?</p> <ol style="list-style-type: none"> Which type of the four operations you must use to be able to solve the problem? <p>Multiplication</p>	

2.Solve the problem and write the answer of it:

$$500 \times 4 = 2.000$$

There are 2.000 sheets in 4 reams.

Expected errors or misconceptions

- Students may confuse the four types of operations (conceptual)
- Students may have problems in understanding the word problem because they read in a hurry (procedural)
- Students may have problems in identify the operation to be able to solve the word problem (conceptual)
- Students may have problem in how to add, subtract, multiply and divide (conceptual)
- Students may confuse the steps and tips to be able to solve the word problem (procedural)

CLASS

Class Phase

Work with students

Time

**Introduction /
Anticipatory Set**

A) Goal(s) presentation

Hello, my dear students are you ready for this lesson?

I want you all in silence and with your desks in order so we can start! You have two minutes to prepare yourself! (radar, strong voice and what do to)

Before explaining you the goal of today I want you to remember the class rules:

- Don't interrupt one another

2 minutes

	<ul style="list-style-type: none"> • Raise your hand to participate and ask questions • Pay attention and work hard! <p>Elisa, so what are the class rules? Excellent see you have a clear view of them!</p> <p>Today we you are going to practice how to solve word problems using addition, subtraction, multiplication, and division. Practicing this is useful because is going to help you refresh your minds and practice to be better and better mathematicians. I know you will do great in this!</p> <p>Pedro, could you say to the whole class what are you going to learn today?</p> <p>Excellent I see you were paying attention! (positive framing)</p>	
	<p>B) Prior knowledge activation</p> <p>So, to start putting our minds in action you are going to do a quick math practice with the whiteboards, I will write in the whiteboard an operation and you will have three minutes to solve the operation and write your answer in your white board, once the times up I will say show me and you must show me all your whiteboards.</p> <p>70 x 5= 350 3.200 + 4.123= 7.323 10.000 – 536= 9.464 150 : 5= 30</p> <p>Excellent job 4B I see you remember these four operations!!</p>	5 minutes

<p>Development</p>	<p>C) New content presentation/ Direct instruction</p> <p>So now that our minds are active, we are going to remember the tips and steps to be able to solve word problems. Who remembers some step or tip? Raising your hand! Excellent job!</p> <p>So now please take out your notebook and copy this steps and tips in it, you have 5 minutes to copy! So, work in silence without bothering others! (the teacher does radar)</p> <p>Steps and tips to solve word problems:</p> <ul style="list-style-type: none"> • Read the problem • Circle important numbers • Underline the question • Box key words • Evaluate which operation will you use • Solve, check, and write the complete answer of the problem <p>Now who remembers what is the role of key words? Yes! That is correct Pedro!</p> <p>Who could read to the class the key words of addition?</p> <p>Who could read to the class the key words of subtraction?</p> <p>Who could read to the class the key words of multiplication?</p> <p>Who could read to the class the key words of division?</p> <p>So, here you can see the key words for each operation:</p> <ul style="list-style-type: none"> • Addition: total, income, increase, both, altogether, sum, plus, combine, in all, add, join 	<p>15 minutes</p>
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- Subtraction: Take away, decrease, remain, difference, minus, how many more? fewer, left
- Multiplication: Times, in all, twice, product, multiple, multiplied by
- Division: Half, same, split, equal groups, separate, divided by, divided, shared equally, distribute, cut up

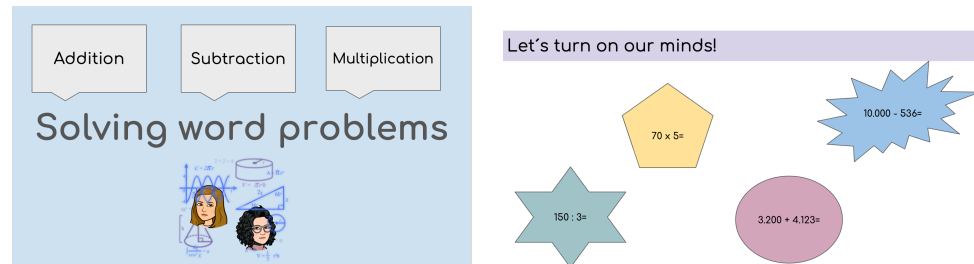
Two conceptual errors and how to address it:

- Students do not confuse the operation that the word problem is asking, remember to pay attention to the key words! Key words help us discover in a clear way the operation we need to do!
- Students remember each operation is calculated in a different way, so to avoid committing error remember the exercises we did at the beginning of the lesson to put our mind in action!

Two procedural errors and how to address it:

- Students remember to avoid having problems in not understanding the word problems. Please follow the steps and tips to be able to solve the problem, this will help you avoid committing errors.
- Students remember to read carefully the word problem, if you read it in a hurry, you may make mistakes because you missed clue words or because you didn't understand it at all, so remember now one is hurrying you!

PPT:



Addition Subtraction Multiplication

Solving word problems

Let's turn on our minds!

$150 : 3 =$ $70 \times 5 =$ $3,200 + 4,123 =$ $10,000 - 536 =$

Tips and steps:

1. Read the problem
2. Circle important numbers
3. Underline the question
4. Box key words
5. Evaluate which operation will you use
6. Solve, check, and write the complete answer of the problem



Key words:

Addition:

- Total
- Come
- Increase
- Both
- Altogether
- Sum
- Plus
- Combine
- in all
- Add
- join

- #### Multiplication:
- Times
 - in all
 - Twice
 - Product
 - Multiple
 - multiplied by

Subtraction:

- Take away
- decrease
- remain
- Difference
- Minus
- How many more?
- Fewer
- left

Division:

- Half
- Same
- Split
- Equal groups
- Separate
- Divided by
- Divided
- Shared equally
- Distribute
- Cut up

Word problem 1:

Sofia has \$3.934 and Pedro has \$5.323. They want to know how much money they have because they want to buy a rabbit. Could you help them know how much money they have in total, so they can see if they can buy the rabbit?

-Show your work:



-Check:

-Complete answer:



Word problem 2:

My sister Josefina has 9.327 chocolate cookies and she sold 681 cookies to my mother. Josefina wants to know how many cookies she has left. Could you help Josefina discover how many cookies she has left?

-Show your work:



-Check:

-Complete answer:



Word problem 3:

Peter sliced a watermelon into 6 equal parts. If each part had 24 seeds, how many seeds did the watermelon have in total?

-Show your work:



-Check:

-Complete answer:



In your whiteboards, write the strategy that helps you the most. Why is it helpful?



D) Scaffolding

20 minutes

D.1 Modeling

D.2 Guided Practice

Now that we reviewed the steps, tips, and clue words, I am going to show you some word problems on the presentation and you will have 5 minutes to solve it and write your answer in your personal whiteboard, when the time ends you must show me all together your answers (show me). Don't worry if you don't have the correct answer, that is fine we all commit errors, and here we are to help you fix them and work all together as a team! Meanwhile students are working the teacher does radar!

Problem 1 addition:

Sofia has \$3.934 and Pedro has \$5.323 and they want to know how much money they have in total, because they want to buy a rabbit. Could you help them know how much money they have in total, so in that way they can see if they can buy the rabbit?

Answer: \$9.257 in total

Problem 2 subtraction:

My sister Josefina has 9.327 chocolate cookies and she sold 681 cookies to my mother. Josefina wants to know how much cookies she has left, could you help Josefina discovering how many cookies she has left?

Answer: 8.646 chocolate cookies left

	<p>Problem 3 multiplication:</p> <p>Peter sliced a watermelon into 6 equal parts. If each part had 24 seeds, how many seeds did the watermelon have in all?</p> <p>Answer: 144 seeds in the watermelon</p> <p>Problem 4 division:</p> <p>There are 7 days in a week. How many weeks are there in 42 days if we separate the days in equal groups?</p> <p>Answer: 6 weeks</p>	
	E) Independent Practice + Feedback	
	F) Consolidating Learning	
Closure	<p>G) End of class assessment</p> <p>Exit ticket</p> <ul style="list-style-type: none"> Read the following word problem and answer to the following two questions: 	3 minutes

A ream contains 500 sheets of paper, how many sheets are in 4 reams?

1. Which type of the four operations you must use to be able to solve the problem?

2. Solve the problem and write the answer of it: