ADDITION OF POSITIVE AND NEGATIVE INTEGERS

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Subject

Mathematics

Prepared By

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Grade Level

4

Overview

This lesson plan covers teaching content for;

1. Addition of positive and negative integers.

Objectives

Students should be able to;

1. Add positive and negative integers.
2. Identify positive and negative sides on the number line.

Activity Starter/Instruction

1. Review the definition of the word integer (a positive or negative number or zero)
2. Show students where negative and positive number lie on the number line.
3. Ask the class for examples of where negative numbers can be found in real-world applications.

Teacher Guide

Day 1/ Lesson 1: 15 Mins

1. Explain to students that each of the green magnets symbolizes +1.
2. Write the following problem on the board: 4 + 3 = __.
3. Count out four magnets and place them on the board.
4. Then explain that you are adding three positive magnets.
5. Ask students how many magnets are on the board (7).
6. Explain that when we add 3 + 4, we do this process without thinking, but that we might have to think more when adding negative integers.

Materials Required

- Magnets of different colors
- Number line

Additional Resources

- https://www.scholastic.com/teachers/sponsored-con
  18/adding-and-subtracting-with-negative-numbers/
- https://www.scholastic.com/teachers/blog-posts/alyc
  approach-teaching-negative-numbers/
- https://www.educationworld.com/a_tsl/archives/03-
- http://www.teach-
  nology.com/lessons/lsn_pln_view_lessons.php?action
- http://www.teach-nology.com/teachers/lesson_plans

Additional Notes

Guided Practice

Day 2/ Lesson 2: 15 Mins

1. Explain to students that each of the red magnets symbolizes -1.
2. Write the following problem on the board: 4 + -3 =?
3. Count out four green magnets and place them on the board.
4. Then explain that you are adding three negative magnets, and add three red magnets to the board.
5. Tell students that positives and negatives will pair up because each negative cancels out a positive.
6. Move three of the green magnets so that they are paired up with the three red magnets, and then move them to the far side of the board.
7. Ask students how many are magnets are left (1).
8. Explain that therefore, 4 + -3 = 1.

Assessment Activity

Ask the pupils to identify positive and negative integers on the number line.

Guided Practice

Day 3/ Lesson 3: 15 Mins

1. Make a two-column chart on the board, and write "+ -" and "- -" in the left column.
2. Ask students to generalize what they have learned in the previous lessons.
3. They should respond that "+ -" equals "- " and that "- -" equals "+."
4. To make this clearer for auditory learners, ask for a volunteer to summarize the chart, and write the summary on the board to be read aloud.
5. The summary should be similar to the following: "plus a negative is the same thing as minus, and minus a negative is the same thing as plus."
6. Have students use this summary to solve additional problems without their manipulatives.

Assessment Activity

Assess pupil's performance in the following areas:

1. Can pupils add positive and negative integers without mixing the signs up?

Summary

1. Ask for volunteers to share their answers to the problems assigned.
2. As the problems are reviewed in front of the class, have the students check their answers for accuracy.