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| SUBTRACTION OF POSITIVE AND NEGATIVE INTEGERS | 3.20.2019 |

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| Subject |  | Overview |
| |  | | --- | | Mathematics | | Prepared By | | [Instructor Name] | | Grade Level | | 4 | |  | This lesson plan covers teaching content for;   1. Subtraction of positive and negative integers. |

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| Materials Required -Magnets of different colors  -Number line |
| Additional Resources  * <https://www.aaamath.com/subint1.htm> * <https://www.wyzant.com/resources/lessons/math/elementary_math/positive_and_negative_numbers/subtracting_positive_and_negative_numbers> * <https://www.khanacademy.org/math/arithmetic/arith-review-negative-numbers/arith-review-sub-neg-intro/a/subtracting-negative-numbers-review> * <https://www.k5learning.com/blog/subtracting-positive-and-negative-numbers> |
| Additional Notes |

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| **Objectives** Students should be able to;   1. Subtract positive and negative integers. 2. Identify positive and negative side 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.   **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. Explain that you are subtracting three negative magnets from four negative magnets. 4. Tell students that the negative will multiply the negative to become positive. 5. Explain that therefore, -4 – (-3) = -1.  Assessment Activity Ask the pupils to identify positive and negative integers on the number. |  | **Teacher Guide** **Day 1/ Lesson 1: 15 Mins**   1. Challenge students with the following problem: 4 – -3 =? 2. Put four green magnets on the board. 3. Ask students what you should do next. 4. Guide them to understand that you will need to add negative magnets to the board, but that in order to do so, you will need to add the same number of positive magnets to the board. 5. Add three pairs of magnets to the board. 6. Then remove three negative magnets and ask students how many magnets remain (+7).   **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 subtract 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. |  |  |