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| SUBTRACTION OF 2-DIGIT NUMBERS WITH EXCHANGING OR RENAMING | 3.20.2019 |

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| Subject |  | Overview |
| |  | | --- | | Mathematics | | Prepared By | | [Instructor Name] | | Grade Level | | 2 | |  | This lesson plan covers teaching content for;   1. Subtraction of 2-digit numbers with exchanging or renaming |

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| Materials Required - Class set of Two Digit Subtraction with regrouping worksheet  - base-ten blocks  - Whiteboard and whiteboard markers  - Hundreds chart  - Number lines  - A large box of toothpick with some bundled into groups of ten or various manipulative (gems, stones, blocks) |
| Additional Resources  * <https://www.education.com/lesson-plan/math-stories> * <http://www.teach-nology.com/lessons/lsn_pln_view_lessons.php?action=view&cat_id=5&lsn_id=9820> * <http://lessonplanspage.com/mathsubtractionshopping2.htm> * <https://www.commonsense.org/education/lesson-plans/whose-group-subtraction-with-regrouping> |
| Additional Notes |

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| **Objectives** Students should be able to;  1. Subtract 2-digit numbers with exchanging or renaming word  2. Use different subtraction method  Assessment Activity  1. Provide a few problems that require regrouping on the board. Have students turn their sheet over and work those problems. Collect or spot check for accuracy. |  | **Activity Starter/Instruction** 1. Write the problem 15 \_\_\_\_ 5 = \_\_\_\_ on the board. Represent the missing operation and difference with a blank circle or line. Say, "I have a problem and I need help solving it! I made 15 cookies to give to my friends. My dad ate 5 cookies before he knew I was giving the cookies to my friends! I have 10 friends and I really wanted to give each of my friends a cookie. Will I have enough cookies for my friends? How can I solve this problem?"  .  **Teacher Practice**  **Lesson 1-20 Mins**  1. Write the number 43 on the board so that students can see. This can also be done on a rug with students sitting in a circle around the demonstration. Ask them what they know about this number and note student responses.  2. If it hasn’t been mentioned, explain that we know that the four represents four tens and the three represents three ones.  3. Take four groups of ten toothpicks bundled with rubber bands and put them above the four. Explain that the sticks are going to represent the values in 43, putting four bundles of ten above the forty and three individual sticks above the number three.  4. Now, write the number -29 under 43 so you have a subtraction problem. Proceed as if you were about to subtract the ones column, taking nine from three. Note that you can’t subtract nine from three, but that you can take 29 from 43 so we know there has to be a way.  5. Ask students, "If we need more ones so that we can take nine away, how can we regroup the forty into ones?" Discuss.  6. Take one bundle of ten and unbundle, or regroup it into the ones, adding it to the three that was already there.  7. Note the new representation in the top number - when you add them they are still equal to 43, they are just grouped differently so that we can subtract.  8. Subtract the ones place and then subtract the tens place using the standard subtraction process. |  | 2. Allow a student or two to share out their ideas about how to solve the problem. Guide them as they share out, and discuss whether the problem needs an addition sign or a subtraction sign.  3. Clarify that the subtraction sign is the correct choice because when we subtract, we figure out the difference of two numbers. Explain that the difference is the result of subtracting one number from another.  4. Record the subtraction sign in the problem so it reads: 15 – 5 =  5. Take student responses. If no one suggests breaking the problem into place value, then suggest it  **Guided Practice**  **Lesson 1-10 Mins**  1. Do another example, this time on the board. Try using 61 - 45 as the example.  2. As you go through this example use the same process, except when you do the regrouping (cross out the six and write five, and add 10 ones to the amount in the ones place)  3. Slow down and remind students of the grouped sticks that the numbers represent, connecting prior knowledge. |
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| Summary Explain to the students that using base-ten blocks is just one way they can solve subtraction problems, including subtraction with regrouping! |  |  |  |  |