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| **Topic 2-1** | Today we will begin a new Unit (Topic 2) in Math. The Big Idea: **Operations and Meanings & Relationships:** There are multiple interpretations of addition, subtraction, multiplication and division of rational numbers, and each operation is related to other operations.  **EQ:** How can the addition properties be used to show relationships that always hold true? | (C) SWBAT use concrete materials and concepts of addition to model the Commutative, Associative, and Identity Properties of Addition.  NCSCOS obj. 5.03; 6.03a; 6.04a; 6.04c | At the beginning of this unit address the Vocabulary Terms: **addends, sum, Commutative (Order) Property, Associative (Grouping) Property, and Identity (Zero) Property**  **Set the Purpose:** You know how to add two 1 digit numbers. Today you will use what you know to explore addition properties that are always true. When might you add two 1 digit numbers? See activity on Teacher Edition p. 32 B. Call students’ attention to the Visual Learning Interactive lesson for 2-1. Tell students that in this lesson they will learn different ways to think about addition and certain addition relationships that are always true. After completing the Visual Learning Interactive lesson Complete Guided Practice p.32 1-5 together. Remind students to think about the properties of addition to help them find the missing numbers. | Students may have difficulties finding the missing number when the expression within parentheses had been simplified. Have students complete Ind. Prac. 6-19 Go over problems together as a whole group. | Some real-world problems involving joining separating, part-part-whole or comparison can be solved using addition. There are certain addition relationships that are always true and can be used to simplify calculations. In this lesson we learned different ways to model addition and use properties of addition to help us solve problems.  Perform Quick Check 2-1  Homework: Practice 2-1 |
| (L) Students use counters to model the Commutative, Associative, and Identity Properties of Addition. |
| **Topic 2-2** | **E.Q.:** How can you use patterns on a hundreds chart to add two-digit numbers? Review properties of addition quickly and then introduce students to the hundreds board. Adding on a hundreds chart builds on students’ place value knowledge. | (C) SWBAT use a hundred chart to add two-digit numbers and develop mental math strategies.  NCSCOS obj. 1.03a; 1.01c; 6.03a; 6.04c | **Set the Purpose**: You know how to add one-digit numbers. Today you will use patterns on the hundred chart to add two digit numbers. When might you add two two-digit numbers?  Draw students’ attention to the Interactive Visual Learning Lesson on Smart board. Tell students that in this lesson they will learn how to add using a hundred chart. After completing the Interactive Lesson, remind students to add ones by moving to the right, to subtract ones by moving to the left, and to adds tens by moving down on the hundred chart.  Complete Guided Practice 1-10 as a whole group. | Students may have difficulty looking at numbers in different ways. Have students complete Independent Practice 11-24 on their own. After they finish go over answers to check for understanding. | Patterns on a hundred chart can be used to add numbers and develop mental math strategies and number sense. In this lesson we learned how to add using place-value patterns on a hundred chart. C  Quick Check 2-2 |

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| **MATH** | **Focus and Review** | **Objectives** | **Teacher Input** | **Guided Practice** | **Independent Practice** | **Closure/Review** |
| **Topic 2-3** | E.Q: How can you break apart numbers to make a ten to add 2-digit numbers using mental math? There is more than one way to do a mental calculation. Techniques for doing addition calculations mentally, like breaking apart numbers and making tens, involve changing the numbers or the expression so the calculation is easy to do mentally and has the same answer as the original calculation. | (C) SWBAT solve problems by adding with mental math.  NCSCOS obj.: 1.03a; 1.01a; 6.03a; 6.04a | **Set the Purpose:** You know how to add numbers on a hundred chart. Today you will add numbers with mental math by using place value or by making a ten.  Draw students’ attention to Interactive Visual Lesson. In this lesson students will learn how to break apart numbers and make tens to solve addition problems using mental math.  Go over Guided Practice 1-5 as a whole group. | | Some students may benefit from Leveled Practice in Exercise 6-11.Have students complete Independent. Practice. 9-23. Go over to check for understanding. | There is more than one way to do a mental calculation. Techniques for doing addition calc. mentally involve changing the numbers or the expressions so the calculation is made to do easy. In this lesson we learned different ways to break apart numbers to break apart numbers to solve addition problems by using mental math |
| (L) Students will use mental math to add 2-digit numbers either by breaking apart the numbers and using place value or by making tens. |
| **Topic 2-4** | E.Q.: How can you round numbers?  Students can use a number line or rounding rules to round numbers. On a number line, a number is rounded to the closest multiple of ten, hundred, and so on. | (C) SWBAT use their number lines to explore how to round 2-and 3- digit numbers to the nearest ten and hundred.  NCSCOS obj.: 1.01b; 1.01c; 6.03a; 6.04c | Today students will learn how to round a number to tell about how much or how many. “Suppose I have a rock collection with 26 rocks in it. If I said I have about 30 rocks, would that be a good way to describe my collection to someone? Why or why not?” Tell students we will be using number lines to help us with rounding. Pass out sentence strips and allow students time to create their own number lines. Draw students attention to the Interactive Visual Learning Lesson on the Smart board. Go through lesson as a group, then complete Guided Practice (p. 41) 1-15 together as a group.  -Introduce Rounding Hill | | Students may have difficulty rounding a 2-digit number to the nearest ten and getting a 3 digit number for an answer. You can go over problem #18 together to address this issue. Have students complete independent practice 16-20 and 27-32 and 38-40 with a partner. Change partners to check over answers. | Review Essential Understanding: Rounding is a process of finding the multiple of ten or one hundred closest to a given number. In this lesson we learned how to round numbers to the nearest ten or hundred. For homework students can complete (1)Reteaching Master 2-4 (2) Practice Master 2-4, or (3) Enrichment Master 2-4. |
| (L) Students round two-digit and three digit whole numbers to the nearest ten or hundred , by comparing to the number halfway between or by using place value. |
| **Topic 2-5** | E.Q.: How can you estimate sums?  One of the primary reasons to estimate sums is to check a calculation. Sums can also be estimated when an exact answer is not needed. | (C) SWBAT solve problems by estimating sums.  NCSCOC obj.: 1.03b; 1.01b; 1.03a; 6.03 | Explain to students that there is more than one way to estimate a sum. Rounding gives one way to estimate sums by replacing numbers with other numbers that are close to an easy to compute with mentally. Today students will know use there knowledge of rounding numbers to tens and hundreds, to help them find about how much the sum of two numbers is. Sometimes when you add, you do not need to find an exact sum. Ask students when this might happen. Draw students’ attention to the Interactive Visual Learning Lesson on Smart board. Complete this lesson together. Remind students to look at the digit to the right of the place value to which they are rounding to determine whether to round a number up or down. Complete Guided Practice (p. 45) 1-9 together. | | Students may have difficulty determining whether the estimate is reasonable. Explain that they can round to the nearest ten or hundred or use a compatible number to decide. Have them complete problems 22-27; 28-30; 36 on their own or with a partner. | Review Essential Understanding: There is more than one way to estimate a sum. Rounding gives one way to estimate by replacing numbers with other numbers that are close and easy to compute with mentally. Homework:  Reteaching Master 2-5  Pactice Master 2-5  Enrichment Master 2-5 |
| (L) Students estimate sums of 2-and 3- digit numbers. |
| **Topic 2-6** | E.Q.: How can you use addition to solve problems. In adding or subtracting 2-digit numbers, it is important to reinforce that like things are being combined: ones are added to or subtracted from ones, tens are added to or subtracted from tens. | (C) SWBAT use place value blocks to model 2-digit addition by breaking apart the numbers using place value.  NCSCOS obj.: 1.03a; 6.03c | Students have learned how to add using a hundred chart or by using mental math. Today they will learn how to use place value to add 2-digit numbers. Suppose a farmer wants to find out how many tomatoes he has in two different baskets. How might he find the answer? (Write problem on chart paper) Farmer John sells tomatoes. He has 58 yellow tomatoes. He has 66 red tomatoes. How many tomatoes does he have in all? Draw students attention to Interactive Visual Lesson on Smart board. Go through lesson together. | | Students might believe that they have to regroup for every addition . Remind them that they only have to regroup when the sum of the digits in a place is 10 or greater. Independent Practice: Reteaching Master 2-6 | The standard addition algorithm for 2-digit number breaks the calculation into simpler calculations using place value starting with the ones and then the tens. In this lesson, we learned how to add two 2-digit numbers by breaking each apart into ones and tens, and then finding the total in each place. When the total number of ones was 10 or more, we regrouped 10 ones as 1 ten. |
| (L) Students add 2-digit numbers using paper and pencil methods and use addition to solve problems. |
| **Topic 2-7** | E.Q.: How can you add 3 digit numbers?  Students will be using place-value blocks to model addition with two 3-digit addends, providing a foundation for understanding the standard algorithm that will be presented in Lesson 3-3. | (C) SWBAT add 3-digit numbers using place value blocks or pictures and record the results using the standard addition algorithm.  NCSCOS obj.: 1.03a; 1.01a; 1.01b; 6.03c; 6.04a | Students know how to add 2-digit numbers. Today you are going to learn how to add 3-digit numbers. Describe a situation in which you might need to add 3-digit numbers. Ask students how we can use place-value blocks to add 3-digit numbers such as 146 and 247? Show me how to regroup 16 ones. Show me how to regroup 16 tens. Have students follow the Interactive Visual Learning Lesson. In this lesson, you will use place-value blocks to add two 3-digit numbers, and then record the result using paper and pencil. Students will only working with models for hundreds, tens, and ones, ands so they will not be asked to regroup hundreds. Remind students to remove each set of ten blocks after they have regrouped it as one block of a higher place value. | | Students might forget to use zero as a place holder in a sum. Remind them that, if they regroup all the ones or all the tens, they must record a zero in the sum to indicate that no ones or tens are left. Have students complete Reteaching Master 2-7 with a partner. | Models and the standard algorithm for adding 3-digit numbers are just an extension to the hundreds place of the models and standard algorithm for adding 2-digit numbers. In this lesson, we learned how to add two 3-digit numbers by using place value blocks. When the total number of ones was 10 or more, we regrouped 10 ones as 1 ten. When the total number of tens was 10 or more, re regrouped 10 tens as 1 hundred. |
| (L) Students use place-value blocks to model 3-digit addition using place value. |