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| **NBT Task 1a** | |
| **Domain** | Number and Operations in Base Ten |
| **Cluster** | Understand place value. |
| **Standard(s)** | **2.NBT.1:** Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:   1. 100 can be thought of as a bundle of ten tens — called a “hundred.” 2. b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones). |
| **Materials** | Pencil, pre-grouped base ten materials |
| **Task** | Show the student the number “247”. Ask: *What is this number?* If the student reads the number incorrectly, tell them the number. Then, say: *Use your base ten materials to make this number*. After the student is finished, ask: *How many hundreds did you use? How many tens did you use? How many ones did you use?* Then, ask: *Explain how do you know that you have 247?*  Using the remaining base ten materials say: *Now, use the base ten materials to make the same number in a different way. After the student is finished, ask: How many hundreds did you use? How many tens did you use? How many ones did you use?* Then, ask: *How do you know that you have 247?* |

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| **Continuum of Understanding** | |
| **Developing Understanding** | * Incorrectly reads the number 247. * Incorrectly builds 247 with base ten materials one or both times or is unable to think of a different way to build 247. * Incorrectly identifies the correct amount of hundreds, tens, and/or ones place for one or both configurations. * Explanation is minimal or only includes counting all of the materials by ones (1, 2, 3, … 246, 247) or counting individual groups (100, 200; ten, twenty, thirty, forty; one, two, three… seven.) |
| **Complete Understanding** | * Reads and builds 247 with base ten materials correctly in two different ways. * Correctly identifies the amount of cubes in the hundreds, tens and ones place for both configurations. * Explanation includes recognizing the relationship between the amount of blocks to the written number 247 (e.g., “I know that there is 247 because there are two hundreds (points to the hundreds), 40 tens (points to the tens), and 7 leftovers (points to the ones). See: two hundred- forty- seven.”) |

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| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others**. |
| 4. Models with mathematics. |
| **5. Uses appropriate tools strategically.** |
| **6. Attends to precision.** |
| **7. Looks for and makes use of structure.** |
| 8. Looks for and expresses regularity in repeated reasoning. |

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| **NBT Task 1b** | |
| **Domain** | Number and Operations in Base Ten |
| **Cluster** | Understand place value. |
| **Standard(s)** | **2.NBT.1:** Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:  a. 100 can be thought of as a bundle of ten tens — called a “hundred.”  b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones). |
| **Materials** | Number 604, pre-grouped base ten materials |
| **Task** | Show the number 604 to the student. Ask: *What is this number?* Say: *Let’s pretend we have this many cubes in front of us. Do you think that there would be enough to make a hundred? How many hundreds do you think there would be? Do you think that there would be some leftover? How many cubes do you think would be leftover?*  Provide the student with the pre-grouped base ten materials. Say: *Use these materials to build this number* (point to 604). After the student has finished ask: *How many hundreds are there? Are there some leftover? How many are leftover?*  Point to the digit in the hundreds place (6). Say: *Show me with your base ten materials this amount.*  Point to the digit in the tens place (0). Say*: Show me with your base ten materials this amount.*  Point to the digit in the ones place (4) and say: *Show me with your materials this amount.*  If there are still cubes left over, point to the remaining cubes and ask: *Why do you think there are still cubes leftover?* |

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| **Continuum of Understanding** | | |
| **Developing Understanding** | * Inaccurately predicts the number of hundreds and/or leftovers in 604. * Incorrectly builds 604 with base ten materials. * Incorrectly shows the correct amount for a digit in the hundreds, tens, and/or ones place. * Has cubes leftover after showing all three amounts. | * Shows 600 cubes for the digit “6”. * Shows 0 cubes for the digit “0”. * Shows 4 cubes for the digit “4”. |
| **Complete Understanding** | * Predicts 6 hundreds and 4 leftovers. * Builds 604 with base ten materials correctly. * Correctly shows the amount of cubes in the hundreds, tens and ones place. |

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| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| 3. Constructs viable arguments and critiques the reasoning of others. |
| 4. Models with mathematics. |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| **7. Looks for and makes use of structure.** |
| 8. Looks for and expresses regularity in repeated reasoning. |

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| **NBT Task 1c** | |
| **Domain** | Number and Operations in Base Ten |
| **Cluster** | Understand place value.  Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.NBT.1** Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:  a. 100 can be thought of as a bundle of ten tens — called a “hundred.”  b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).  **2.NBT.8** Mentally add 10 or 100 to a given number 100 – 900, and mentally subtract 10 or 100 from a given number 100-900. |
| **Materials** | Pencil, Paper *Optional: Provide base ten materials for the student to use to answer each question rather than asking the student to draw the blocks.* *Rather than circling, ask the student to point to the blocks.* |
| **Task** | Provide materials to the student.   * Show the number 179 to the student. Say: *Ruth made this number* (179- Do not read number) *using base ten blocks*. *Draw the blocks below.* After the student has drawn the base ten blocks say: *In your picture, circle the part of the blocks that shows this digit* (point to **7**). * Once the student has drawn a circle around the blocks, say: *Now add more blocks to your picture so that the value of all of the blocks is 199.* * Once the student is finished, say: *Use words and numbers to explain why you think that the value of all of the blocks is now 199.* |

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| **Continuum of Understanding** | |
| **Developing Understanding** | * Incorrectly reads the number 179. * Student attempts to draw (or model) the number 179 but does so incorrectly. * Incorrectly circles an amount that does not equal 70 (e.g., circles 7 individual cubes) * Incorrectly adds the amount of blocks needed to change the number to 199. * Changes 179 to 199 by placing one cube at a time, counting on from 179 to 199. * Explanation is minimal or inaccurate. |
| **Complete Understanding** | * Correctly reads the number 179. * Accurately draws (or models) the number 179. (Note: There are numerous ways to make this number with base ten materials. One common way is 1 hundred, 7 tens, and 9 ones.) * Correctly circles 7 tens or a combination of blocks that equals 70. * Changes 179 to 199 by placing 2 tens. * Explanation indicates understanding of the value of each block used. |

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| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| 3. Constructs viable arguments and critiques the reasoning of others. |
| 4. Models with mathematics. |
| **5. Uses appropriate tools strategically.** |
| **6. Attends to precision.** |
| **7. Looks for and makes use of structure.** |
| 8. Looks for and expresses regularity in repeated reasoning. |

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| **NBT Task 1d** | |
| **Domain** | Number and Operations in Base Ten |
| **Cluster** | Understand place value.  Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.NBT.1** Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:  a. 100 can be thought of as a bundle of ten tens — called a “hundred.”  b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).  **2.NBT.8** Mentally add 10 or 100 to a given number 100 – 900, and mentally subtract 10 or 100 from a given number 100-900. |
| **Materials** | Pencil, Paper *Optional: Provide base ten materials for the student to use to answer each question rather than asking the student to draw the blocks.* *Rather than circling or placing a square around the materials, ask the student to point to the blocks.* |
| **Task** | Provide materials to the student.   * Show the number 543 to the student. Say: *Sam made the number* (543- Do not read number) *using base ten blocks*. *Draw the blocks below.* After the student has drawn the base ten blocks say: *In your picture, circle the part of the blocks that shows this digit* (point to **5**). * Once the student has drawn a circle around the blocks, say: *Now change your picture so that the value of all of the blocks is 503* (Student may put an “X” over the pieces to be removed)*.* After the student has finished, say: *Use words and numbers to explain why you think that the value of all of the blocks is now 503.* |

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| **Continuum of Understanding** | |
| **Developing Understanding** | * Incorrectly reads the number 543. * Student attempts to draw (or model) the number 543 but does so incorrectly. * Incorrectly circles an amount that does not equal 500 (e.g., circles 5 individual cubes) * Incorrectly removes the amount of blocks needed to change the number to 503. * Changes 543 to 503 by removing one cube at a time, counting back from 179 to 199. * Explanation is minimal or inaccurate. |
| **Complete Understanding** | * Correctly reads the number 543. * Accurately draws (or models) the number 543. (Note: There are numerous ways to make this number with base ten materials. One common way is 5 hundred, 4 tens, and 3 ones.) * Correctly circles 5 hundreds or a combination of blocks that equals 500. * Changes 543 to 503 by removing 4 tens. * Explanation indicates understanding of the value of each block used. |

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| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| 3. Constructs viable arguments and critiques the reasoning of others. |
| 4. Models with mathematics. |
| **5. Uses appropriate tools strategically.** |
| **6. Attends to precision.** |
| **7. Looks for and makes use of structure.** |
| 8. Looks for and expresses regularity in repeated reasoning. |

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| **NBT Task 1e** | |
| **Domain** | Number and Operations in Base Ten |
| **Cluster** | Understand place value. |
| **Standard(s)** | **2.NBT.1:** Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:   1. 100 can be thought of as a bundle of ten tens — called a “hundred.” 2. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones). |
| **Materials** | none |
| **Task** | Say: *What if Abigail had 80 cubes in a pile. How many tens do you think she could make? Do you think she will have any left over?* If the student answers “yes”, ask: *How many leftover cubes do you think she will have?*  Say: *What if Dylan had 604 cubes in a pile. How many hundreds do you think he could make? Do you think he will have any left over?* If the student answers “yes”, ask: *How many leftover cubes do you think he will have?* |

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| **Continuum of Understanding** | |
| **Developing Understanding** | * Incorrectly states the correct amount for one or both questions. * Guesses or counts to determine number of tens, hundreds and/or left overs (e.g., holding up fingers as counts by 10s: 10, 20, 30… 80). |
| **Complete Understanding** | * Automatically knew, without counting, that there would be 8 tens without any left over. * Automatically knew, without counting, that there would be 6 hundreds and 4 left over. |

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| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| 3. Constructs viable arguments and critiques the reasoning of others. |
| 4. Models with mathematics. |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| **7. Looks for and makes use of structure.** |
| 8. Looks for and expresses regularity in repeated reasoning. |

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| **NBT Task 1f** | |
| **Domain** | Number and Operations in Base Ten |
| **Cluster** | Understand place value. |
| **Standard(s)** | **2.NBT.1:** Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:   1. 100 can be thought of as a bundle of ten tens — called a “hundred.” 2. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones). |
| **Materials** | BLM: Number cards 3, 5 and 9, pencil |
| **Task** | Provide the materials to the student. Read the directions to the student: *Use the cards to make the three largest possible numbers. When you are finished, explain how you know that they are the three largest possible numbers.* |

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| **Continuum of Understanding** | | |
| **Developing Understanding** | * Student indicates one or more incorrect numbers. * Explanation does not mention or indicate an understanding of the value of each digit. (e.g., “953 is a big number.”) | Strategy(ies) Used:   * Trial and Error * Automatically placed largest card in 100s or 10s place |
| **Complete Understanding** | * Student correctly identifies the three largest numbers (953, 935, 593). * Explanation indicates an understanding of the value of each digit, and the need for the largest digit to be in the hundreds place (and in the tens place). (e.g., “I know that 953 is the largest number because 9 is the biggest number. So I put it in the hundreds place. 5 is the next biggest so I put it in the tens place.”) |

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| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| 4. Models with mathematics. |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| **7. Looks for and makes use of structure.** |
| **8. Looks for and expresses regularity in repeated reasoning.** |









**Use the cards to make the three largest possible numbers.**

The three largest possible numbers are:

1.

2.

3.

The largest number is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Explain your reasoning.

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| **NBT Task 1g** | |
| **Domain** | Number and Operations in Base Ten |
| **Cluster** | Understand place value. |
| **Standard(s)** | **2.NBT.1:** Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:   1. 100 can be thought of as a bundle of ten tens — called a “hundred.” 2. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones). |
| **Materials** | BLM: Number cards 0, 1 and 2, pencil |
| **Task** | Provide the materials to the student. Read the directions to the student: *Use the cards to make the three largest possible numbers. When you are finished, explain your reasoning.* Say: *How you know that they are the three largest possible numbers?* |

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| **Continuum of Understanding** | | |
| **Developing Understanding** | * Student indicates one or more incorrect numbers. * Explanation does not mention or indicate an understanding of the value of each digit. (e.g., “210 is a big number.”) | Strategy(ies) Used:   * Trial and Error * Automatically placed largest card in 100s or 10s place |
| **Complete Understanding** | * Student correctly identifies the three largest numbers (210, 201, 120). * Explanation indicates an understanding of the value of each digit, and the need for the largest digit to be in the hundreds place (and in the tens place). (e.g., “I know that 210 is the largest number because 2 is the biggest number. So I put it in the hundreds place. 1 is the next biggest so I put it in the tens place.”) |

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| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| 4. Models with mathematics. |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| **7. Looks for and makes use of structure.** |
| **8. Looks for and expresses regularity in repeated reasoning.** |









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| **NBT Task 2a** | |
| **Domain** | Number and Operations in Base Ten |
| **Cluster** | Understand place value.  Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.NBT.2** Count within 1000; skip-count by 5s, 10s, and 100s.  **2.NBT.3** Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.  **2.NBT.8** Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900. |
| **Materials** | SF, Pencil, Paper |
| **Task** | Provide materials to the student. Read the problem to the student:   1. *David is counting students as they come into school. He has counted* [586- do not read the number] *students so far. What numbers should he say for the next 5 students? What number should David say for the 10th person after student 586? Explain your reasoning.* 2. *Kaylee is giving away movie tickets. She had* [223- do not read the number] *when she started giving them away. What are the next 5 numbers that Kaylee will say as she* ***counts******backwards****? After giving away 10 tickets, how many will Kaylee have? Explain how you know.* |

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| **Continuum of Understanding** | | |
| **Developing Understanding** | * Incorrectly answers one or more questions. * Appears that student knew sequence, but wrote one or more numbers inaccurately by reversing order of the digits (e.g., writes 578 for 587, but continues on correctly). * Explanation is minimal or indicates counting all/on as primary strategy (e.g., “I counted on from 586. 586, 587, 588, etc.). | Solutions:   1. 586: 587, 588, 589, 590, 591   10th number: 596   1. 223: 222, 221, 220, 219, 218,   10th number: 213 tickets |
| **Complete Understanding** | * Correctly answers all questions. * Writes all numbers accurately. * Explanation includes 10 more/10 less, without counting by ones. |

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| **Standards for Mathematical Practice** |
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| **2. Reasons abstractly and quantitatively.** |
| 3. Constructs viable arguments and critiques the reasoning of others. |
| 4. Models with mathematics. |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| **7. Looks for and makes use of structure.** |
| 8. Looks for and expresses regularity in repeated reasoning. |

1. David is counting students as they come into school. He has counted 586 students so far. What numbers should he say for the next 5 students?

586, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_

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| What number should David say for the 10th person after student 586? \_\_\_\_\_\_\_  Explain your reasoning. |

1. Kaylee is giving away movie tickets. She had 223 when she started giving them away. What are the next 5 numbers that Kaylee will say as she **counts backwards**?

223, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_

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| After giving away 10 tickets, how many tickets will Kaylee have? \_\_\_\_\_\_\_  Explain your reasoning. |

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| **NBT Task 2b** | |
| **Domain** | Number and Operations in Base Ten |
| **Cluster** | Understand place value.  Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.NBT.2** Count within 1000; skip-count by 5s, 10s, and 100s.  **2.NBT.3** Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.  **2.NBT.8** Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900. |
| **Materials** | SF, Pencil, Paper |
| **Task** | Provide materials to the student. Read the problem to the student:   1. *Adam had already counted* [294- do not read the number] *box tops. As he continues counting what are the next 7 numbers that he will count? When Adam counts the 10th box top, what number will he say? Explain your reasoning.* 2. *Aldin has a pile of* [504- do not read the number] *pennies. As he puts them in a bag, he counts* ***backwards****. What are the next 6 numbers that he should say? After Aldin had put 10 pennies in the bag what number will he say? Explain your reasoning.* |

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| **Continuum of Understanding** | | |
| **Developing Understanding** | * Incorrectly answers one or more questions. * Appears that student knew sequence, but wrote one or more numbers inaccurately by reversing order of the digits (e.g., writes 259 for 295, but continues on correctly). * Explanation is minimal or indicates counting all/on as primary strategy (e.g., “I counted on from 294. 294, 295, 296, etc.). | Solutions:   1. 294: 295, 296, 297, 298, 299, 300, 301   10th number: 304   1. 504: 503, 502, 501, 500, 499, 498   10th number: 494 |
| **Complete Understanding** | * Correctly answers all questions. * Writes all numbers accurately. * Explanation includes 10 more/10 less, without counting by ones. |

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| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| 3. Constructs viable arguments and critiques the reasoning of others. |
| 4. Models with mathematics. |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| **7. Looks for and makes use of structure.** |
| 8. Looks for and expresses regularity in repeated reasoning. |

1. Adam has already counted 294 box tops. As he continues counting, what are the next 7 numbers he will count?

294, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_,

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| When Adam counts the 10th box top, what number will he say? \_\_\_\_\_\_\_  Explain your reasoning. |

1. Aldin has a pile of 504 pennies. As he puts them in a bag, he counts backwards. What are the next 6 numbers that he should say?

504, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_

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| After Aldin puts 10 pennies in the bag, what number will he say? \_\_\_\_\_\_\_  Explain your reasoning. |

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| **NBT Task 3a** | |
| **Domain** | Number and Operations in Base Ten |
| **Cluster** | Understand place value.  Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.NBT.1:** Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:  a. 100 can be thought of as a bundle of ten tens — called a “hundred.”  b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).  **2.NBT.3.** Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.  **2.NBT.8** Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900. |
| **Materials** | SF, Pencil, Paper |
| **Task** | Provide materials to the student. Read the problem to the student in sections as appropriate.   1. *Nikki has three hundred seventy-five single stickers. Write the number of stickers in number form.* 2. *If stickers come in sheets of 100, strips of 10, and single stickers, Nikki has: \_\_\_\_ sheets of 100 stickers, \_\_\_ strips of 10 stickers, \_\_\_\_ single stickers* 3. *Draw a picture of the sheets, strips, and singles.* 4. *Write the number of stickers that Nikki has in expanded form.* 5. *If Nikki added another sheet of stickers how many stickers would she now have? Explain your reasoning.* |

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| **Continuum of Understanding** | |
| **Developing Understanding** | * Incorrectly writes 375. * Incorrectly identifies the number of 100s, 10s, and/or ones. * Picture does not accurately reflect 375. * Incorrectly writes 375 in expanded form. * Incorrectly determines 100 more, or does so with counting as the primary strategy (by ones, counting on, counting by tens). |
| **Complete Understanding** | * Correctly writes 375 in both number form (375) and expanded form (300 + 70 + 5). * Correctly identifies 3 sheets, 7 strips, and 5 singles and drawing accurately represents each amount. * Correctly determines 100 more mentally or stating 100 more than 375 is 475. Primary strategy does not include counting. |

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| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| 3. Constructs viable arguments and critiques the reasoning of others. |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| **7. Looks for and makes use of structure.** |
| 8. Looks for and expresses regularity in repeated reasoning. |

1. Nikki has three hundred seventy-five single stickers. Write the number of stickers in number form. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. If stickers come in sheets of 100, strips of 10, and single stickers, Nikki has:

\_\_\_\_ sheets of 100 stickers

\_\_\_\_ strips of 10 stickers

\_\_\_\_ single stickers

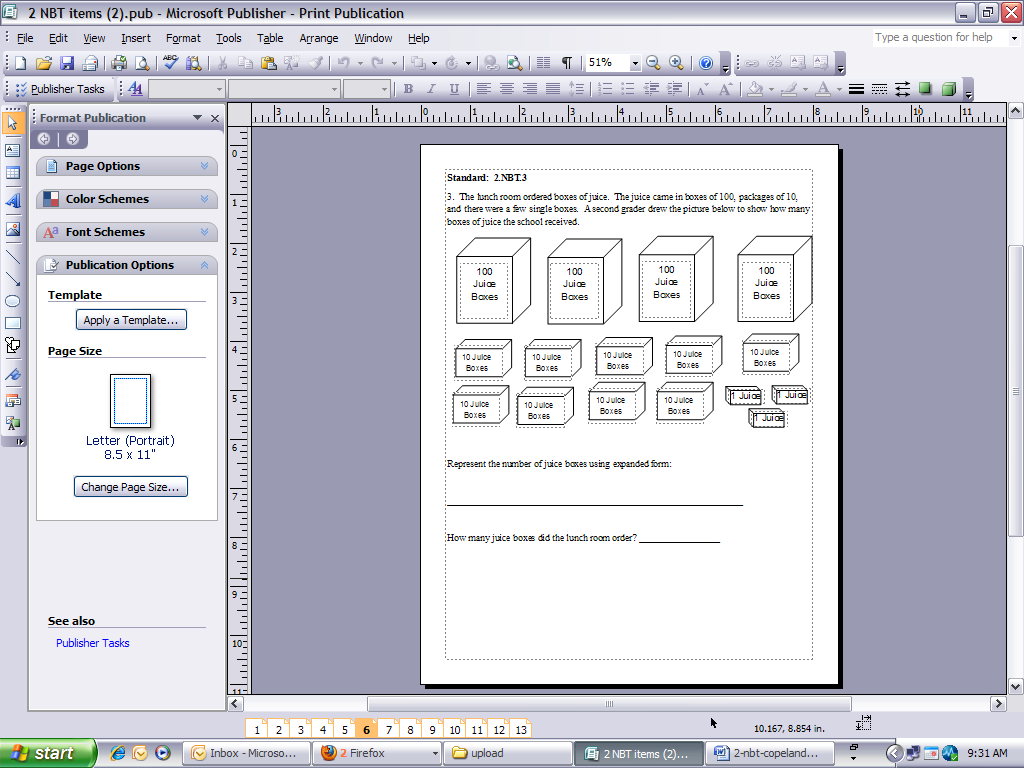
1. Draw a picture of the sheets, strips, and singles.
2. Write the number of stickers that Nikki has in expanded form.
3. If Nikki added another sheet of stickers how many stickers would she now have? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Explain your reasoning.

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| **NBT Task 3b** | |
| **Domain** | Number and Operations in Base Ten |
| **Cluster** | Understand place value.  Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.NBT.1:** Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:  a. 100 can be thought of as a bundle of ten tens — called a “hundred.”  b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).  **2.NBT.3.** Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.  **2.NBT.8** Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900. |
| **Materials** | SF, Pencil, Paper |
| **Task** | Provide materials to the student. Read the problem to the student in sections as appropriate.  *The Elementary School lunch room ordered boxes of juice. The juice came in boxes of 100, packages of 10, or single boxes. A second grader drew the picture below to show how many boxes of juice the school received.*   1. *How many juice boxes did the lunch room order? Write the number of juice boxes in number form.* 2. *Write the number of juice boxes using expanded form.* 3. *The next day, the Middle School ordered 40* ***fewer*** *juice boxes than the Elementary School lunch room. How many juice boxes did they order? Explain your reasoning.* |

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| **Continuum of Understanding** | |
| **Developing Understanding** | * Incorrectly writes 493. * Incorrectly writes 493 in expanded form. * Incorrectly determines 40 fewer, or does so with counting by ones as the primary strategy. |
| **Complete Understanding** | * Correctly writes 493 in both number form (493) and expanded form (400 + 90 + 3). * Correctly determines 40 fewer than 493 is 453 by using groups of tens to solve (mentally or stating 10 less or crossing off juice boxes). Primary strategy does not include counting. |

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| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| 3. Constructs viable arguments and critiques the reasoning of others. |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| **7. Looks for and makes use of structure.** |
| 8. Looks for and expresses regularity in repeated reasoning. |

**The Elementary School lunch room ordered boxes of juice. The juice came in boxes of 100, packages of 10, or single boxes. A second grader drew the picture below to show how many boxes of juice the school received.**

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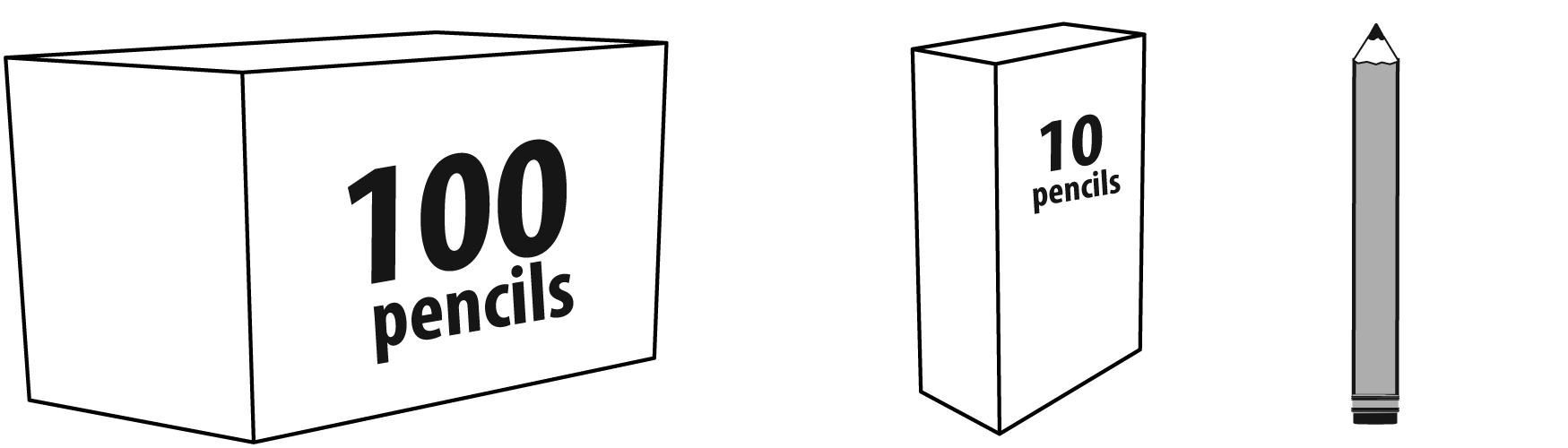
1. How many juice boxes did the lunch room order? Write the number of juice boxes in number form. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Write the number of juice boxes using expanded form.

3. The next day, the Middle School ordered 40 **fewer** juice boxes than the Elementary School  
lunch room. How many juice boxes did they order? \_\_\_\_\_\_\_\_\_ Explain your reasoning.

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| **NBT Task 3c** | |
| **Domain** | Number and Operations in Base Ten |
| **Cluster** | Understand place value. |
| **Standard(s)** | **2.NBT.3.** Read and write numbers to 1000 using base-ten numerals, number names, and expanded form. |
| **Materials** | SF, Pencil, Paper |
| **Task** | Provide materials to the student. Read the problem to the student.  *Pencils come in cases of 100, packs of 10, or as single pencils. Write the number of pencils that you have in number form and expanded form.*   1. *6 singles, 9 packs, and 4 cases* 2. *1 pack, 3 singles, and 7 cases* 3. *8 cases, 2 singles, and 3 packs* 4. *0 packs, 5 cases, and 0 singles* 5. *1 case, 0 singles and 4 packs* 6. *5 packs, 7 cases, and 0 singles* 7. *1 case, 0 packs, and 9 singles* |

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| **Continuum of Understanding** | | |
| **Developing Understanding** | * Errors are made either in writing the number form or expanded form. | Correctly writes:   * Number Form * Expanded Form   Solutions:   1. 496, 400 + 90 + 6 2. 713, 700 + 10 + 3 3. 832, 800 + 30 + 2 4. 500, 500 + 0 + 0 5. 140, 100 + 40 + 0 6. 750, 700 + 50 + 0 7. 109, 100 + 0 + 9 |
| **Complete Understanding** | * Correctly solves each item in both number form and expanded form. |

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| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| 3. Constructs viable arguments and critiques the reasoning of others. |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| **7. Looks for and makes use of structure.** |
| 8. Looks for and expresses regularity in repeated reasoning. |

**Pencils come in cases of 100, packs of 10, or as single pencils.**

**Write the number of pencils that you have in number form and expanded form.**

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|  | **Number Form** | **Expanded Form** |
| 1. 6 singles, 9 packs, and 4 cases |  |  |
| 1. 1 pack, 3 singles, and 7 cases |  |  |
| 1. 8 cases, 2 singles, and 3 packs |  |  |
| 1. 0 packs, 5 cases, and 0 singles |  |  |
| 1. 1 case, 0 singles and 4 packs |  |  |
| 1. 5 packs, 7 cases, and 0 singles |  |  |
| 1. 0 packs, 1 cases, and 9 singles |  |  |

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| **NBT Task 3d** | |
| **Domain** | Number and Operations in Base Ten |
| **Cluster** | Understand place value. |
| **Standard(s)** | **2.NBT.1:** Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:   1. 100 can be thought of as a bundle of ten tens — called a “hundred.” 2. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).   **2.NBT.3.** Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.  **2.NBT.4** Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, < symbols to record the results of comparisons. |
| **Materials** | SF, Pencil, Paper |
| **Task** | Provide materials to the student. Read the directions to the student: *Make true equations. Write a number in every space.* You may suggest to students to draw pictures as needed to help solve the problems. |

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| **Continuum of Understanding** | | |
| **Developing Understanding** | * Errors are made either in writing the number form or expanded form. | Solutions:   1. 230 2. 150 3. 406 4. 900 5. 1, 0, 7 6. 10, 7 7. 107 8. 384 |
| **Complete Understanding** | * Correctly solves each item. |

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| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| 3. Constructs viable arguments and critiques the reasoning of others. |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| **7. Looks for and makes use of structure.** |
| 8. Looks for and expresses regularity in repeated reasoning. |

**Make true equations. Write a number in every space.**

1. 2 hundreds + 3 tens = \_\_\_\_\_
2. \_\_\_\_\_ = 5 tens + 1 hundred
3. 6 ones + 4 hundreds = \_\_\_\_\_
4. 9 hundreds = \_\_\_\_\_
5. 107 = \_\_\_\_\_ hundred + \_\_\_\_\_tens + \_\_\_\_\_ ones
6. 107 = \_\_\_\_\_ tens + \_\_\_\_\_ ones
7. 107 = \_\_\_\_\_ ones
8. 80 + 300 + 4 = \_\_\_\_\_

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| **NBT Task 3e** | |
| **Domain** | Number and Operations in Base Ten |
| **Cluster** | Understand place value. |
| **Standard(s)** | **2.NBT.1:** Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:   1. 100 can be thought of as a bundle of ten tens — called a “hundred.” 2. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).   **2.NBT.3.** Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.  **2.NBT.4** Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, < symbols to record the results of comparisons. |
| **Materials** | SF, Pencil, Paper |
| **Task** | Provide materials to the student. Read the directions to the student: *Are these comparisons true or false? Circle True or False. Explain your reasoning.* Prompt if needed: *Explain why you think a comparison is true or false.* |

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| **Continuum of Understanding** | | |
| **Developing Understanding** | * Incorrectly solves one or more items. * Explanation does not indicate an understanding of the symbols. | Solutions:   1. True 2. True 3. False |
| **Complete Understanding** | * Correctly solves each item. * Explanation indicates an understanding of the symbols and correct interpretation of each number provided. (e.g., “302 is more than 48”; “183 is less than 813 because 183 only has one hundred and 813 has 8 hundreds”; “345 is less than 400. The sentence says that 345 is greater than 400. So it’s false. 345 only has 3 hundreds.” |

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| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| **4. Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| **7. Looks for and makes use of structure.** |
| 8. Looks for and expresses regularity in repeated reasoning. |

**Are these comparisons true or false? Circle True or False.**

**Explain your reasoning.**

1. 3 hundreds + 2 ones > 4 tens + 8 ones True / False

Explain your reasoning.

1. 8 tens + 1 hundred + 3 ones < 813 True / False

Explain your reasoning.

1. 345 > 4 hundreds True / False

Explain your reasoning.

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| **NBT Task 4a** | |
| **Domain** | Number and Operations in Base Ten |
| **Cluster** | Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | 2**.NBT.7** Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.  **2.NBT.8** Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900.  **2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations. (Note: Explanations may be supported by drawings or objects.) |
| **Materials** | SF, Pencil, Paper, pre-grouped base ten materials |
| **Task** | Provide the materials to the student. Read the problem to the student: *Annie had 360 stickers. She gave some of her stickers to Claire. Now Annie has 220 stickers. How many stickers did Annie give to Claire? Explain your reasoning with drawings, words, and/or numbers.* |

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| **Continuum of Understanding** | | |
| **Developing Understanding** | * Incorrectly solve the problem. * Relies on counting as primary strategy for solving problem. * Explanation is lacking in detail or non-existent. | Strategy(ies) Used:   * Counting All * Counting On * Makes Tens * Basic Facts * Creates easier or known sums * Doubles * Doubles +/- 1, 2 * Properties of operations * Adds/subtracts hundreds & hundreds * Adds/subtracts tens & tens * Add/subtracts ones & ones * 10/100 more/less * Other: |
| **Complete Understanding** | * Correctly solves the problem: 140 stickers * Successfully uses strategies such as place value, properties of operations, compose/decompose hundreds/tens/ones, and/or mentally adds/subtracts 100. * Explanation is logical, accurate and illustrates strategies used. |

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| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| 3. Constructs viable arguments and critiques the reasoning of others. |
| 4. Models with mathematics. |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| 7. Looks for and makes use of structure. |
| **8. Looks for and expresses regularity in repeated reasoning.** |

**Annie had 360 stickers. She gave some of her stickers to Claire. Now Annie has 220 stickers. How many stickers did Annie give to Claire?**

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| Explain your reasoning with drawings, words, and/or numbers.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ stickers |

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| **NBT Task 4b** | |
| **Domain** | Number and Operations in Base Ten |
| **Cluster** | Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.NBT.7** Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.  **2.NBT.8** Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900.  **2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations. (Note: Explanations may be supported by drawings or objects.) |
| **Materials** | SF, Pencil, Paper, pre-grouped base ten materials |
| **Task** | Provide the materials to the student. Read the problem to the student: *Michael earned $215 during his summer paper route. His older brother earned $335 during his summer yard business. How much did Michael and his brother earn during the summer? Explain your reasoning with drawings, words, and/or numbers.* |

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| **Continuum of Understanding** | | |
| **Developing Understanding** | * Incorrectly solve the problem. * Relies on counting as primary strategy for solving problem. * Explanation is lacking in detail or non-existent. | Strategy(ies) Used:   * Counting All * Counting On * Makes Tens * Basic Facts * Creates easier or known sums * Doubles * Doubles +/- 1, 2 * Properties of operations * Adds/subtracts hundreds & hundreds * Adds/subtracts tens & tens * Add/subtracts ones & ones * 10/100 more/less * Other: |
| **Complete Understanding** | * Correctly solves the problem: $550 * Successfully uses strategies such as place value, properties of operations, compose/decompose hundreds/tens/ones, and/or mentally adds/subtracts 100. * Explanation is logical, accurate and illustrates strategies used. |

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| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| 4. Models with mathematics. |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| **7. Looks for and makes use of structure.** |
| 8. Looks for and expresses regularity in repeated reasoning. |

**Michael earned $215 during his summer paper route. His older brother earned $335 during his summer yard business. How much did Michael and his brother earn during the summer**

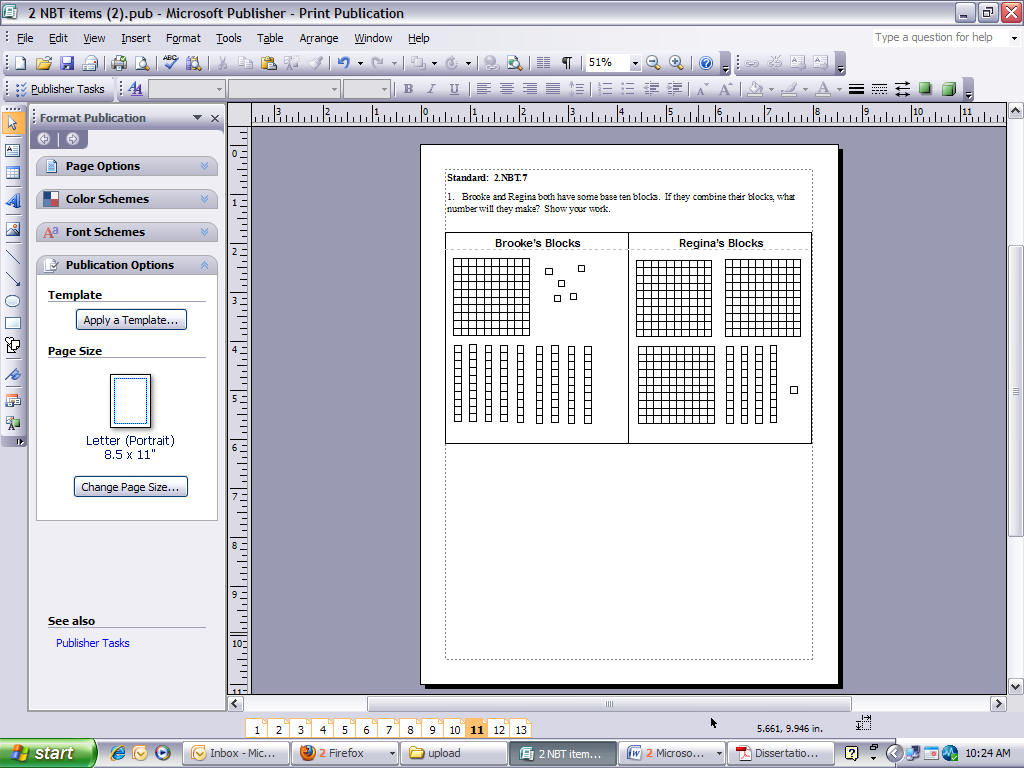
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| Explain your reasoning with drawings, words, and/or numbers.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_money |

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| **NBT Task 4c** | |
| **Domain** | Number and Operations in Base Ten |
| **Cluster** | Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.NBT.7** Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.  **2.NBT.8** Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900.  **2.NBT.9**. Explain why addition and subtraction strategies work, using place value and the properties of operations. (Note: Explanations may be supported by drawings or objects.) |
| **Materials** | SF, Pencil, Paper |
| **Task** | Provide the materials to the student. Read the problem to the student: *Brooke and Regina both have some base ten blocks. Brooke has 315 blocks and Regina has 221 blocks If they combine their blocks, how much do they have altogether? Explain your reasoning with drawings, words, and/or numbers.*  *When Mary adds her blocks to Brooke’s and Regina’s blocks they have 700 blocks. How many blocks did Mary have? Explain your reasoning drawings, words, and/or numbers.* |

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| **Continuum of Understanding** | | |
| **Developing Understanding** | * Incorrectly solves one or both problems. * Relies on counting as primary strategy for solving problem. * Explanation is lacking in detail or non-existent. | Strategy(ies) Used:   * Counting All * Counting On * Makes Tens * Basic Facts * Creates easier or known sums * Doubles * Doubles +/- 1, 2 * Properties of operations * Adds/subtracts hundreds & hundreds * Adds/subtracts tens & tens * Add/subtracts ones & ones * Other: |
| **Complete Understanding** | * Correctly solves both problems: 536; 164. * Rather than counting, successfully uses strategies such as place value, properties of operations, compose/decompose hundreds/tens/ones, and/or mentally adds/subtracts 100. * Explanation is logical, accurate and illustrates strategies used. |

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| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| 4. Models with mathematics. |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| **7. Looks for and makes use of structure.** |
| 8. Looks for and expresses regularity in repeated reasoning. |

**Brooke and Regina both have some base ten blocks.**



1. **If they combine their blocks, how much do they have altogether? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Explain your reasoning with drawings, words, and/or numbers.

1. **When Mary adds her blocks to Brooke’s and Regina’s blocks they have 700 blocks.**

**How many blocks did Mary have? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Explain your reasoning with drawings, words, and/or numbers.

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| **NBT Task 4d** | |
| **Domain** | Number and Operations in Base Ten |
| **Cluster** | Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **2.NBT.7** Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.  **2.NBT.8** Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900.  **2.NBT.9.** Explain why addition and subtraction strategies work, using place value and the properties of operations. (Note: Explanations may be supported by drawings or objects.) |
| **Materials** | SF, Pencil, Paper, pre-grouped base ten materials |
| **Task** | Provide the materials to the student. Read the problem to the student: *Sunshine Elementary has 216 first graders and 278 second graders. All of the first and second graders are on the playground. How many students are on the playground? Explain your reasoning with drawings, words, and/or numbers.*  *Of all the first and second graders on the playground, one hundred of the students were playing on the blacktop. The rest of the students were playing on the field. How many students were playing in the field? Explain your reasoning drawings, words, and/or number and write an equation to match the situation.* |

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| **Continuum of Understanding** | | |
| **Developing Understanding** | * Incorrectly solves one or both problems. * Relies on counting as primary strategy for solving problems. * One or both explanations are lacking in detail or non-existent. * Equation is inaccurate. | Strategy(ies) Used:   * Counting All * Counting On * Makes Tens * Basic Facts * Creates easier or known sums * Doubles * Doubles +/- 1, 2 * Properties of operations * Adds/subtracts hundreds & hundreds * Adds/subtracts tens & tens * Add/subtracts ones & ones * Other: |
| **Complete Understanding** | * Correctly solves both problems:   + 494 students on the playground   + 394 students were playing on the field. * Rather than counting, successfully uses strategies such as place value, properties of operations, compose/decompose hundreds/tens/ones, and/or mentally adds/subtracts 100. * Explanations are logical, accurate and illustrate strategies used. * Equation is accurate (e.g., 494 – 100 = 394). |

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| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| **3. Constructs viable arguments and critiques the reasoning of others.** |
| 4. Models with mathematics. |
| 5. Uses appropriate tools strategically. |
| **6. Attends to precision.** |
| **7. Looks for and makes use of structure.** |
| 8. Looks for and expresses regularity in repeated reasoning. |

Sunshine Elementary has 216 first graders and 278 second graders. All of the first and second graders are on the playground. How many students are on the playground?

Explain your reasoning with drawings, words, and/or numbers.

**\_\_\_\_\_\_\_ students are on the playground.**

Of all the first and second graders on the playground, one hundred of the students were playing on the blacktop. The rest of the students were playing on the field. How many students were playing in the field?

Explain your reasoning with drawings, words, and/or numbers.

**\_\_\_\_\_\_\_\_\_\_ students were not playing on the field.**

Write an equation to match the situation.