67. Let's Get Organized! The 3-Place Mat

- SORT BLOCKS BY SIZE
- ORGANIZE GROUPS OF BLOCKS FROM LARGEST TO SMALLEST WITH THE LARGER TO THE LEFT OF THE SMALLER
- SET DIGIT CARDS
- READ 3-DIGIT NUMBERS

STUDENT NEEDS:
55 single blocks
6 packed blocks-of-ten
10 small holders
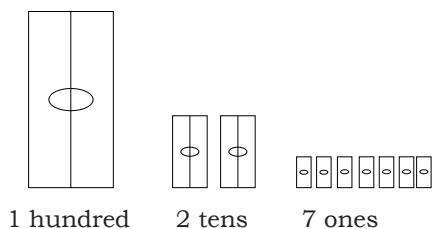2 medium holders
digit flip cards
3-place mat

TEACHER NEEDS:
47 single blocks
8 packed blocks-of-10
8 small holders
2 medium holders
digit flip cards

◑ 30 minutes

1 hundred   2 tens   7 ones

HELPFUL HINT:
First review Lesson 59: *Getting Organized - Introduction to the 2-Place Mat*

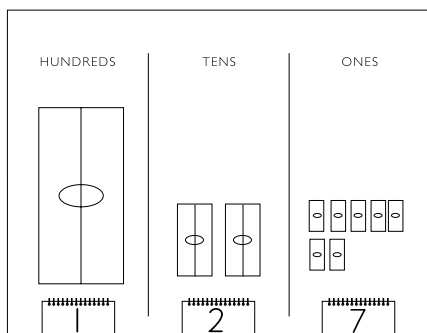| HUNDREDS | TENS | ONES |
| 1 | 2 | 7 |

GROUP ACTIVITY:

1. In a scrambled pile, place 47 single blocks and 8 blocks-of-10 on the floor or on a table at the front of the classroom.
2. Ask students what they could do to make it easier to tell how many blocks there are. (pack)
3. Ask volunteers to pack the blocks as much as possible (1 block-of-100, 2 blocks-of-10, 7 single blocks).
4. Explain that you are going to organize the blocks. Have volunteers help group the blocks so that all the blocks of each size are together.
5. Place blocks so that the students' view of the block-of-100 is to the left of the blocks-of-10 and the blocks-of-10 to the left of the singles. Explain what you have done, pointing out that the blocks are in order (largest, medium, smallest).
6. Ask volunteers to count the number of each size block. (1, 2, 7)
7. Read the number ("one hundred twenty-seven").
8. Explain that if someone has a lot of blocks, the best way to be sure how many there are is to pack and organize them.
9. Point out that each size block must have its own digit card.
10. Ask volunteers to help set the digit cards for each size block. (1, 2, 7)
11. Point to the ones and ask how many single blocks there are. (7)
12. Point to the blocks-of-10 and ask, "How many single blocks are inside here?" (20)
13. Point to the block-of-100 and ask, "How many single blocks are inside?" (100)
14. Write 100 + 20 + 7 = 127 where all can see and discuss where all the numbers can be seen in the blocks.

1. Give each student or group of students a collection of blocks that includes many single blocks (at least 55) and many packed blocks-of-10 (at least 6). Students may have different numbers of blocks.
2. Students pack the blocks as much as possible.
3. Students organize the blocks by:
   - Placing all of the blocks of the same size together. Double check that there are not more than nine of any size showing because they could be packed again.
   - Placing the largest block(s) to the far left, the medium block(s) in the middle, and the smallest block(s) on the right.
   - Students count how many of each size block they have.
   - Students set their digit cards by using one card for each size block.
4. Students draw what they organized blocks look like and then write the number of blocks they have, using the digit cards for reference.
5. Students read their number out loud. It may be helpful for students to first say how many of each size block they have (e.g. "One block-of-100, 5 blocks-of-10, 7 ones"), then read the number (e.g. "One hundred fifty-seven").

GROUP WRAP-UP:

1. Show students the 3-place mat and ask what they see (three places and the words hundreds, tens and ones).
2. Ask how this could be helpful in organizing blocks.
3. Ask a volunteer to place this collection of blocks on the mat and to set the digit cards.
4. Continue with several collections until students understand that there are 3 places - one for each size block:
   - 1st is hundreds
   - 2nd is tens
   - 3rd is ones
5. Set the digits where each digit card stands for the number of each size block.
6. Read the digits.

Assessment:

DOES THE STUDENT:
- pack as much as possible
- sort and group blocks by size
- organize blocks in order from largest to smallest, left to right
- set digit flip cards correctly
- read the number of blocks correctly

Differentiation:

REINFORCEMENT:
- Review the lesson "Pack as Much as Possible" before beginning this lesson.
- Begin with smaller collections of blocks so that the final answer is a 2-digit number.
- Ask students to first make a train with the blocks and count them in the train, then cover the full cars, organize the blocks, and count them in the packed view.
- Have students organize their blocks on a place value mat.

EXTENSION:
- After completing the above activity, give students a combination of single blocks and blocks-of-10 that packs to make a 3-digit number with 0 in the tens or ones place, such as 106 or 130.

Name: _____

ONES

TENS

HUNDREDS