

36. Pattern of the Count

- REINFORCE ONE-TO-ONE CORRESPONDENCE
- SEE, HEAR AND WRITE THE PATTERN OF THE COUNT
- RECOGNIZE THE BASE TEN NUMBER CODE OF DIGITS 0-9
- IDENTIFY THE PLACE VALUE OF THE DIGITS

TEACHER NEEDS:

10 single blocks
place value mat
digit flip cards

STUDENT GROUPS OF 3 NEED:

up to 99 single blocks
up to 18 small holders
worksheet
place value mat
digit flip cards

 30 minutes

HELPFUL HINTS:

Save the student worksheets and repeat this lesson with increasing numbers as the year goes on. Once the concept of the pattern is understood, students can continue from the last ending point each time to reach larger and larger numbers.

TENS ONES

	2
	3
	4
	5
	6
	7
	8
	9
	0
	1
	2
	3
	4
	5
	6
	7
	8

GROUP ACTIVITY:

1. Set a place value mat with digit cards set to 0 in the ones place and in the tens place.
2. Have a volunteer take and place a single block on the place value mat in the ones place.
3. Ask a second volunteer to turn the digit flip card to that number. (1)
4. Have a third volunteer record that number on the worksheet. (Note: It is possible to start at the top or the bottom of the worksheet.)
5. Repeat these steps placing a single block on the mat, turning the digit card to indicate the count and recording the count on the worksheet until the tenth block is placed.
6. At the tenth block, the digit card will turn back to 0. Facilitate a discussion that guides the students to the conclusion that they need to pack the single blocks and then place the block-of-10 in the tens place.
7. Students now have two sizes of blocks.
 - They need two digit flip cards to show the count. Have the volunteer flip the digit card in the tens place to the number of blocks-of-10 on the mat. (1)
 - They need two columns to record, one column for the tens and one column for the ones. Have the volunteer record the 1 in the tens column and the 0 in the ones column for the number 10.

TENS ONES

1 9
2 0
2 1
2 2
2 3
2 4
2 5
2 6
2 7
2 8
2 9
3 0
3 1
3 2
3 3
3 4
3 5
3 6
3 7
3 8
3 9
4 0
4 1
4 2
4 3
4 4
4 5
4 6
4 7
4 8
4 9
5 0
5 1
5 2
5 3
5 4
5 5
5 6
5 7
5 8
5 9
6 0
6 1
6 2
6 3
6 4
6 5
6 6

SMALL GROUP ACTIVITY:

1. Give each group of three a worksheet and a cup of blocks. (Note: Number of blocks can be varied according to the level of the group.)
2. Assign roles to each student. Each group will have a block loader, a digit card setter and a recorder. Explain that they are to take turns with the jobs.
3. Students work in their small groups repeating the outlined steps to find out how many blocks they have in their cup:
 - The block loader places one single block on the place value mat in the ones place
 - The digit card setter adjusts the digit cards accordingly
 - The recorder writes the number on the recording sheet
4. If a group or groups finish quickly, refill the cup of blocks and have them continue the count where they left off. When they have filled all of the spaces on one page, attach another recording sheet.

GROUP WRAP-UP:

1. Bring the children together and pick several workstations to compare. For each workstation:
 - count the blocks on the mat
 - relate the count to the digit cards
 - relate the count to the pattern record worksheet

HUNDREDS TENS ONES

	6	7
	6	8
	6	9
	7	0
	7	1
	7	2
	7	3
	7	4
	7	5
	7	6
	7	7
	7	8
	7	9
	8	0
	8	1
	8	2
	8	3
	8	4
	8	5
	8	6
	8	7
	8	8
	8	9
	9	0
	9	1
	9	2
	9	3
	9	4
	9	5
	9	6
	9	7
	9	8
	9	9
	0	0
	0	1
	0	2
	0	3
	0	4
	0	5
	0	6
	0	7
	0	8
	0	9
	1	0
	1	1
	1	2
	1	3
	1	4

2. Ask students questions such as:

- Are the counts all the same? Why or why not?
- How are the blocks organized on the place mat?
- Do the digits match the last number you recorded on your strip? Why or why not?
- How do you know if the last number you wrote is correct?
- How do you know that the digits are set correctly?
- What patterns do you hear when you say the numbers?
- What patterns do you see as you turn the digit card(s)?
- What patterns do you see in the numbers recorded on your worksheet?
- Could you use this recording sheet forever? Let students come to the conclusion that they could only use this strip until they reached 99 and then they would need a 3-place strip.

Keep the recorded student strips and allow groups to **continue their pattern throughout the year.**

Students can advance to a 3-place strip (found in appendix) after they have learned to count to 100 in Lesson 58: *How Many Boots*.

Assessment:

DOES THE STUDENT:

- follow the three-step directions
- count in correct sequence taking one block for each number
- turn the digits correctly in terms of the counting sequence
- write the count correctly on their worksheet
- talk about patterns that they see in the count

Differentiation:

REINFORCEMENT:

- For students for whom writing the numbers is too difficult, dot print the numbers on a worksheet and make copies. Those students can trace the numbers as they go.

EXTENSION:

- Use a 3-place mat for students who are ready to see the pattern continue into the hundreds. Use the 3-place recording sheet to continue..
- Start with 50 or so blocks on the place value mat and have the students take the blocks off while saying and recording the pattern

