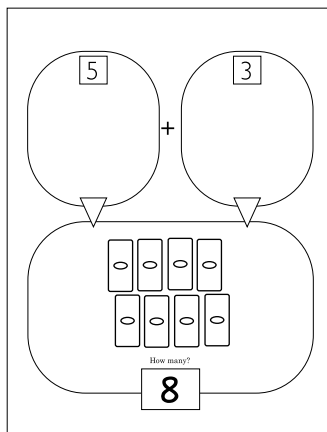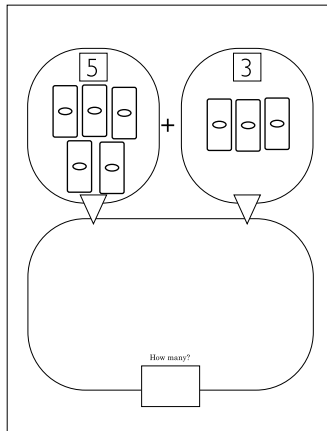# 12. Introduction to Combining Groups

- INTRODUCE THE BASIC OPERATION OF ADDITION
- INTRODUCE THE "+" SIGN AS AN INSTRUCTION TO COMBINE SETS
- GIVEN A NUMBER, MAKE THE EQUIVALENT SET OF BLOCKS
- COUNT SETS OF BLOCKS

STUDENT NEEDS:
single blocks
worksheets
number cubes

◑ 25 minutes

HELPFUL HINTS:
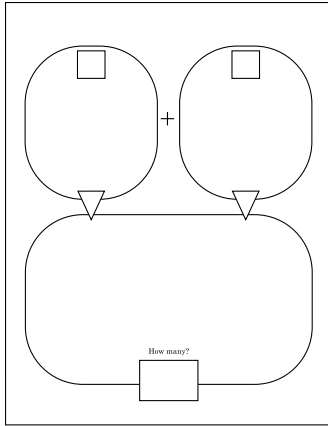Make additional worksheets for Independent Work from the blank template.

This lesson can be repeated on a weekly basis. Numbers can be bigger as students begin to master teens, 20's and 30's.

GROUP INTRODUCTION:

1. Begin by showing the "+" sign and asking students if they know what it is.
2. Look at other signs (stop sign, walk sign, do not enter sign).
3. Explain that these are all instructions. The plus sign is an instruction to add or to combine.
4. Write 2 + 3 on the board.
5. Explain that the plus sign tells us to combine 2 and 3.
6. Take two blocks, take three blocks and combine them.

GROUP ACTIVITY:

1. Pass out the first worksheet (5 + 3). Have each student follow along doing each step on his or her worksheet.
2. Tell students they are going to make small sets (groups) of blocks and then combine them to make larger sets.
3. Ask a volunteer to come forward and make a group of five blocks. Ask the student to count them out loud to verify.
4. Ask another volunteer to make a set of three blocks and to count them out loud.
5. Write the number of blocks in each group on the board (5, 3). Number sentences will be introduced later, but you can write a blank number sentence on the board and fill in the numbers (_ + _ =) in this format for students to use.
6. Ask a volunteer to make one set by combining the two sets.
7. Have the volunteer count the number of blocks and write the number.
8. Explain that when we combine two groups, it will make a larger group.
9. Show students the additional pre-filled worksheet(s) and give directions.

1. In the top left of their worksheet, students make a group of blocks for the given number.
2. Leaving the first group in place, students make a second group in the top right of their worksheet for that number.
3. Students slide both groups of blocks to the bottom of the page.
4. Students count the total number of blocks.
5. Students write the number in the space provided.
6. Students repeat for all examples. A blank template of the worksheet has been provided so you can make multiple versions of the same exercise.

Assessment:

DOES THE STUDENT:
- make groups of the correct number of blocks
- combine groups to make a larger group
- count the blocks accurately
- write the correct numbers

Differentiation:

REINFORCEMENT:
- Provide students who are having trouble counting the blocks with a list of numbers or digit flip cards which they can use to verify their counts.

EXTENSION:
- Give students a number and ask students to generate their own examples of smaller groups that combine to make that number.