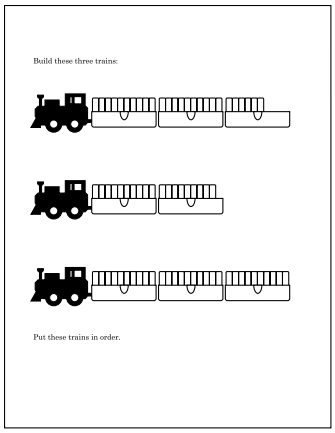
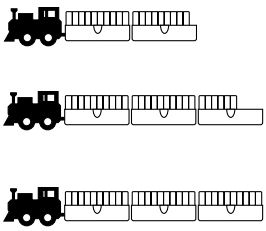
39. Ordering Trains

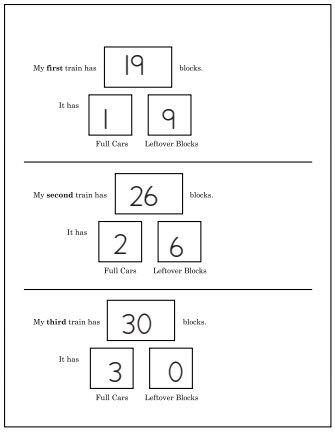
- COMPARE AND ORDER SETS USING ORDINAL NUMBERS
- BUILD A TRAIN TO MATCH A DRAWING
- COUNT BY TENS AND ONES TO 30
- WRITE THE NUMBER

STUDENT NEEDS:
75 single blocks
8 small holders
worksheets

15 minutes







INDEPENDENT WORK:

1. Students build three trains to match each of the trains on the first worksheet.
2. Students rearrange the trains in order from shortest to longest.
3. Students count the blocks in the first train (19) and write the number in the first box on the second worksheet.
4. Students count the number of full cars (1) and the number of leftover blocks (9) in the last car of that train and write these numbers in the spaces provided in the first section of the worksheet.
5. Repeat for the second (26) and third (30) trains.

GROUP LESSON WRAP-UP:

1. Point out that for each train, the digits for their counted number (i.e. 19) were the same as for the full cars and leftovers (i.e. 1 and 9).
2. Point out that the shortest train has the fewest blocks and that 19 is the smallest of the three numbers.
3. Point out that the longest train has the most blocks and that 30 is the largest of the three numbers.
4. Prompt a discussion by asking the students if there is a way to tell how to order the numbers by only looking at the numerals. Guide the discussion to conclude that the number with the smallest first digit, or the digit representing the full cars, tells which number is smallest, and that the number with the largest first digit, or the most full cars, tells which is the largest number.

5. Write the numbers 24, 28 and 17 on the board. Explain that together the class will put the three numbers in order from smallest to largest.
6. "First imagine what the trains would look like for these numbers. How many full cars would the train for 24 have?" (2) "How many full cars would the train for 28 have?" (2 "How many full cars would the train for 17 have?" (1)
7. Ask the students which number is the smallest and how they know. (17 because it has the fewest full cars.)
8. Ask the students which number is the largest. Since both 24 and 28 have two full cars, prompt the discussion that leads to the explanation of looking at the next digit, the ones digit, or the number of leftover blocks. "Since both 24 and 28 have two full cars, we need to find which number has more leftover blocks. How many leftover blocks does 24 have?" (4) "How many leftover blocks does 28 have?" (8) "So which number is larger?" (28) "We now know that 17 is smallest of the three numbers and 28 is largest."
9. Write the numbers on the board from smallest to largest. (17, 24, 28)

Assessment:

DOES THE STUDENT:
- make trains to match each drawing
- place the trains in order from shortest to longest
- count the total number of blocks in each train accurately
- count the number of full cars and leftover blocks in each train accurately
- write the correct numbers for each count

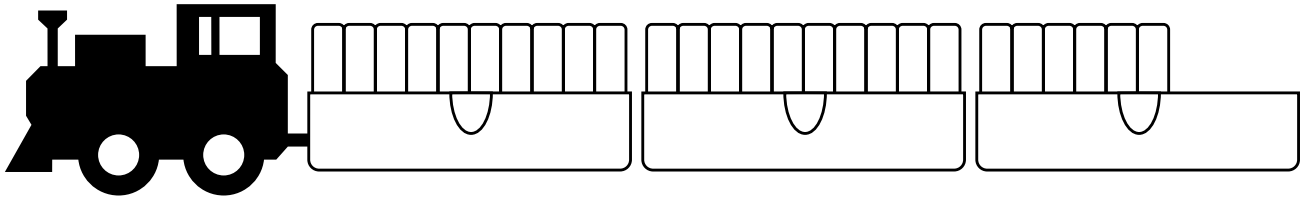
Differentiation:

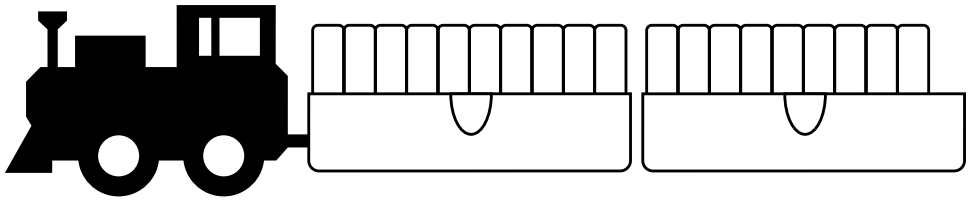
REINFORCEMENT:
- Remove one train from the first worksheet, so students only have to compare two trains.

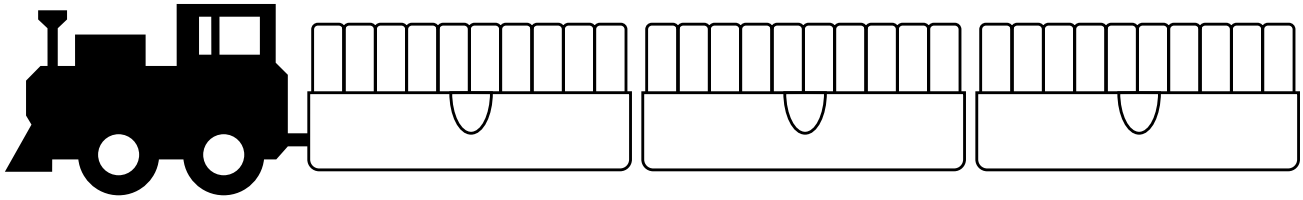
EXTENSION:
- Working in pairs, each student builds three trains of different lengths (but less than 100). Then, students place their partner's trains in order from shortest to longest and count the blocks in each train.
- Repeat above, but put trains in order from longest to shortest.

Name: _____

Build these three trains:







Put these trains in order from shortest to longest.

Name: _____

The **first** train has ☐ blocks. It has ☐☐

Full Cars Leftover Blocks

The **second** train has ☐ blocks. It has ☐☐

Full Cars Leftover Blocks

The **third** train has ☐ blocks. It has ☐☐

Full Cars Leftover Blocks