## 23. Short and Long Trains

- ORDER NUMBERS FROM LEAST TO GREATEST

STUDENT NEEDS:
worksheets
large paper to glue cutouts scissors
glue
TEACHER NEEDS
98 single blocks
11 small holders
© 30 minutes


GROUP ACTIVITY:

1. Show students a train of 32 , a train of 28 , and a train of 38. Do not tell them the number of blocks in each train.
2. Ask a volunteer to put the trains in order from shortest to longest. Make sure the trains are placed where they can be easily manipulated by students.
3. Ask volunteers to count the blocks in each train.
4. Write the three numbers in order on the board (28, 32, 38).
5. Ask "What if instead of seeing the trains, we only saw the numbers? Would we still be able to put the numbers in order? How could we tell which number was largest?"
6. If necessary, prompt students to remember that the digits in the tens place represent full cars on the train and the digits in the ones place represent leftover blocks. Then, ask which is longer: one full car or one leftover block? Discuss the strategy of first ordering the numbers according to the tens place; then, if necessary (if there is more than one number with the same digit in the tens place), looking at the ones place to finish ordering the numbers.
7. Write the numbers $27,19,24,35$ on the board.
8. Ask students to explain how they would put the numbers in order.
9. As a class, order the numbers. (19, 24, 27, 35)
10. Ask volunteers to build a train for each number to verify that the numbers are in the correct order.
11. Students cut out the trains from the first worksheet.
12. Students place the trains in order from shortest to longest.
13. Students glue the trains in order on a blank piece of paper.
14. Students cut out the numbers from the second worksheet.
15. Students place the numbers in order from least to greatest.
16. Students glue the numbers in order on a large blank piece of paper.

Assessment:
DOES THE STUDENT:

- order pictures of trains correctly
- order non-sequential numbers correctly


## Differentiation:

REINFORCEMENT:

- Students use blocks either to model the numbers as they are ordering or to check their work after they have finished.

EXTENSION:

- Give students a "challenge list" of numbers to put in order, such as:
- $32,52,25,53,23,35,22$ or
- $24,33,42,44,34,22,43$
- After ordering a list of numbers, point to two adjacent numbers and ask the student to name a number that is between those numbers.
- $\quad$ Students write a list of given numbers in order from greatest to least.

Cut out these trains and put them in order from shortest to longest.


Cut out these numbers and put them in order from smallest to largest.


