


# 8. Rolling Trains















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- MAKE A SET FROM A NUMBER
- COUNT BY ONES
- COUNT FROM ANY NUMBER
- WRITE THE NUMBER

## STUDENT NEEDS:

30 single blocks  
3 small holders  
6-sided number cube  
worksheet(s)

 30 minutes

 3	 3
 5	 8
 4	 12
 1	 13
 4	 17
 6	 23
 5	 28

Example solution. Actual answers will vary.

## HELPFUL HINTS:

If classroom management is a concern, use one number cube for the whole class. One student rolls the number cube and announces the number to the class. A different student rolls the next time. Take turns counting the train or count in unison after each roll.

## GROUP ACTIVITY:

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1. Explain that today the class will play a game where students will keep adding blocks to a train to make it longer and longer.
2. Demonstrate the steps of how to complete the worksheet by using volunteers to model one full worksheet together as a class.

## INDEPENDENT WORK:

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1. Students roll a six-sided number cube.
2. Students write the number they rolled in the top left column of their worksheet.
3. Students make a set of that many blocks.
4. Students place the set of blocks in a holder to start their train.
5. Students count their train, always starting at the beginning (one).
6. Students write the total number of blocks on their train at the top of the right column.
7. Repeat for a total of seven rolls. Each subsequent roll adds blocks to the same train, not to a new train.

### *Assessment:*

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#### DOES THE STUDENT:

- write the correct number from the number cube
- add the correct number of blocks to the train
- count the number of blocks on the train correctly
- write the number of blocks from the train correctly

### *Differentiation:*

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#### REINFORCEMENT:

- Complete the worksheet together as a class or in small groups. Move through each step together: announce which number was rolled, write that number on a sample worksheet, on the board or overhead projector, count trains together, etc.
- Consider having students roll their number cube seven times in a row, filling in the left column of their worksheet, then adding onto their train seven times, filling in the right column.

#### EXTENSION:

- Students can play in pairs with two blank worksheets. After seven rolls whoever has made the longest train wins.
- If students finish early, provide a second worksheet and repeat the activity.
- If students are able to handle larger numbers, allow them to use a second worksheet increasing the length of the train by seven additional rolls.
- Use a nine- or 10-sided number cube to generate longer trains.

Name: \_\_\_\_\_

Each time you roll a die, add that many blocks to your train.



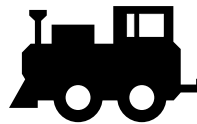
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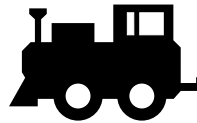
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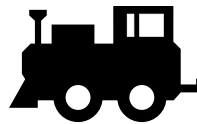
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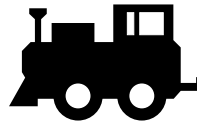
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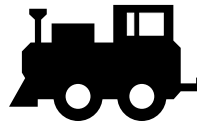
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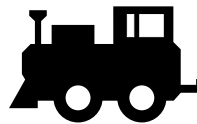
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