

Square Trains

This is a group task. Use your **roles** to help your group accomplish this task.

Facilitator: Make sure your group reads all the way through this card together before you begin. *Who wants to read? Does everyone get what to do? Make sure everyone's ideas are heard. Make sure everyone understands and can ask questions before you move on. Does anyone have a question about that method? Do you want to hear it again?*

Recorder/Reporter: You need to be sure everyone in your group is recording the information and has a complete assignment. The teacher will record the "group quiz" score on your paper. It should be easy to read, well organized, and make use everyone in the group's ideas. *How can we show that idea? What's another way to make that clear?*

Team captain: Make sure your group gets off to a quick start and stays on task. Remind your group that it's not enough to have the result: they must explain *why* their method makes sense. Look for *connections* among the different methods. *How do you know that for sure? How will that work on this other one? How does that related to...?"*

Materials Manager: You are responsible for getting any needed materials, ensure appropriate use of materials, organizing clean up, and returning materials. You are also responsible for asking *group questions*. A group question is a question that everyone in your group knows and no one can answer it.

Shown here are "square trains." They grow in a pattern. Each square train has a perimeter.

Square Trains



Figure 1

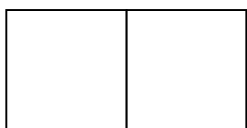


Figure 2

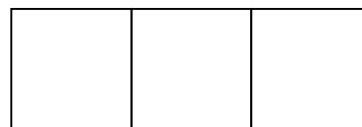


Figure 3

With your group, answer the following questions.

1. Create figure 4 with your square tiles. Draw it here and label it Figure 4.

2. Find the perimeter for Figure 4

3. Find the perimeter of a train with 80 squares.



Check point! Please call an instructor over for a group quiz. Everyone should be able to explain your answer to #3 and how you figured it out. **Score:** _____

