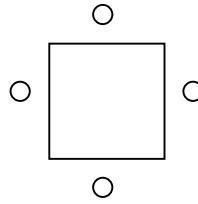


# Street Party

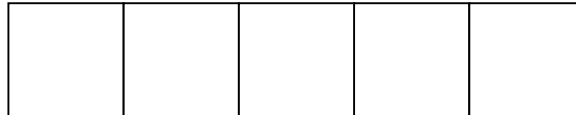
Dean's community is planning a street party.

They have lots of small square tables.

Each table seats 4 like this:



The community decides to put tables in an end-to-end line along the street to make one big table like this:



1. Make a line with 2 tables. How many people will be able to sit at it?
2. Make a line with 4 tables. How many people will be able to sit at it?
3. Make a line of tables that would seat ...  
(a) 8 people                      (b) 12 people                      (c) 20 people
4. Find two ways of showing all your results so far.  
Show these ways in the space provided on your record sheet and write any comments on the results in the space provided below the two boxes.
5. Dean says they can borrow 99 tables.  
How many people could they seat?  
Write a note to Dean explaining how you got your answer.
6. How could you work out how many people they could seat for any number of tables?  
Write to Dean explaining your method in the space on your record sheet.
7. Jen wants to use a small table that is not square.  
Make a different shape for a small table.  
Draw your small table for Jen showing the people sitting around it on your record sheet.
8. Use your small table to make some big tables by putting small tables together.  
Draw three diagrams in the space on your record sheet showing how the big table grows the number of people that can sit around it as it grows.  
Explain to Jen what happens as your table grows by showing your findings in another way.
9. How many of your small tables would you need for 200 people?
10. Find a rule to work out how many of your small tables you would need for any number of people at the party.  
Write a note to Jen explaining your rule.

NAME .....

CLASS .....

## Street Party Record Sheet

1. Number of people at a long table made up of 2 square tables is \_\_\_\_\_

2. Number of people at a long table made up of 4 square tables is \_\_\_\_\_

3a. Number of tables needed for 8 people is \_\_\_\_\_

3b. Number of tables needed for 12 people is \_\_\_\_\_

3c. Number of tables needed for 20 people is \_\_\_\_\_

4. Show your findings in 2 ways in the spaces below and make any comments in the marked spaces

|  |  |
|--|--|
|  |  |
|--|--|

Any comments?

5. Write a note to Dean explaining your answer in the space below.

Dear Dean

6. Explain to Dean how you could work out how many people they could seat for any number of tables.

7. Draw your small table here.

8. In the space below draw three diagrams to show how the big table grows and shows the number of people that can sit around it. Explain to Jen what happens.

9. For 200 people I would need \_\_\_\_\_ small tables.

10. Write a note to Jen explaining your rule to work out how many of your small tables you would need for any number of people at the party.

Dear Jen

**Choose and tick a box that best describes how you worked with your partner when you did this task.**

I did very little

I did a small part of the work

We both did some of the work

I did more of the work

I did most of the work

# SCORING RUBRICS FOR USE WITH THE STREET PARTY TASK

From the Middle Years Numeracy Research Project - September 2000

| Question | Response  | Score |
|----------|---|-------|
| 1        | Incorrect   | 0     |
|          | Correct   | 1     |
| 2        | Incorrect   | 0     |
|          | Correct   | 1     |
| 3a       | Incorrect   | 0     |
|          | Correct   | 1     |
| 3b       | Incorrect   | 0     |
|          | Correct   | 1     |
| 3c       | Incorrect   | 0     |
|          | Correct   | 1     |
| 4        | Recording incorrect or not systematic   | 0     |
|          | One systematic correct method eg list or diagram  | 1     |
|          | Two systematic correct methods eg diagram or table  | 2     |
|          | Two systematic methods that include a table or relationship   | 3     |
| 5a       | Incorrect   | 0     |
|          | Correct   | 1     |
| 5b       | No explanation or irrelevant answer or explains process only eg. "I used a calculator"  | 0     |
|          | Explanation relies on pattern but does not include a relationship between the number of people and the number of tables eg. "goes up by 2s" | 1     |
|          | Explanation based on a relationship eg. "the number of people is double the number of tables plus two for the ends"                         | 2     |
| 6        | No explanation or irrelevant answer   | 0     |
|          | Explanation based on patterns only eg. "it always goes up by two"   | 1     |
|          | Explanation based on generalised relationship expressed in words or symbols   | 2     |
| 7        | Incorrect diagram or no response  | 0     |
|          | Correct diagram for shape chosen  | 1     |
| 8a       | Incorrect diagram or no response  | 0     |
|          | Three correct diagrams for shape chosen   | 1     |
| 8b       | Recording incorrect   | 0     |
|          | Recording correctly shows understanding of linear pattern of growth. eg. systematic diagram   | 1     |
|          | Recording correctly shows understanding of relationship between variables. eg. table showing the number of tables and number of people      | 2     |
| 9        | Incorrect or no response  | 0     |
|          | Correct number for shape chosen   | 1     |
| 10       | No response or irrelevant response or explains process only. eg. "I used a calculator"  | 0     |
|          | Rule relies on pattern but does not indicate a relationship between the number of people and the number of tables                           | 1     |
|          | Correct rule describing relationship in words or symbols  | 2     |