## Math Live - Patterns: Assessment Task

The school bought tables in the form of trapezoids for the cafeteria.
Two chairs are placed on the long side of the table and one chair is placed on each of the short sides.

As shown below, the cafeteria staff placed the tables end to end to save space.



1. Use the trapezoid shapes provided to build models of arrangements made with 4,5 and 6 tables. Draw a picture of each model below and record the number of chairs surrounding each arrangement.

| 4 tables |
| :--- |
|  |
| 5 tables |
|  |
| 6 tables |
|  |

2. Show how many chairs can be placed around 1 to 6 tables by completing the chart below.

| Number of tables |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Number of chairs |  |  |  |  |  |  |

3. Describe a pattern rule that can be used to describe the relationship between the number of tables and the number of chairs.
4. Use your pattern rule to find out how many chairs will fit around 10 tables. Show all your thinking.
