

**Subject n°8**

**SEQUENCES**

**Please don't write on the exam paper and don't forget to give back the examination paper at the end of the test.**

A child's set of building blocks usually consists of many cubes – all the same size and decorated with letters of the alphabet, numbers, animals, or different colours. A typical stacking exercise involves making a row of blocks, with each block touching the one next to it, and then making a row on top of that first row where each block in the second row *straddles* two blocks beneath it. In this way, as more rows are added, each row has one less block than the row it is sitting on.

Little Jimmy is stacking his cube-shaped blocks. His first row has 20 blocks, and each subsequent row has one block less than the one below. If there are 250 blocks in Jimmy's set, will he have enough blocks to build a structure all the way up to one block on the top?

***NB- straddle : chevaucher.***