# Consolidating linear sequences and representing problems with algebra 

Mathematics
Independent Task

Miss Jones

## Sticky Problem

Bob is making square patterns using sticks from his garden.


He records the amount of sticks used for each pattern in a table.
What is the term-to-term rule? Can you complete the table?

| Number of <br> squares made | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of sticks <br> used |  |  | 10 | 13 | 16 |  |

## Vegetable Variables

Laura has a vegetable garden. She plants y potatoes.

## Create expressions in terms of ' $y$ ' to correctly fill in the blanks for each sentence.

She plants double the amount of carrots as the number of potatoes. She plants $\qquad$ carrots.

She plants 10 fewer turnips than potatoes. She plants $\qquad$ turnips.

She plants half as many leeks than potatoes. She plants $\qquad$ leeks.

She plants 13 more tomatoes than potatoes. She plants $\qquad$ tomatoes.

## Challenge:

She plants twice as many courgettes as turnips.
She plants $\qquad$ courgettes.

