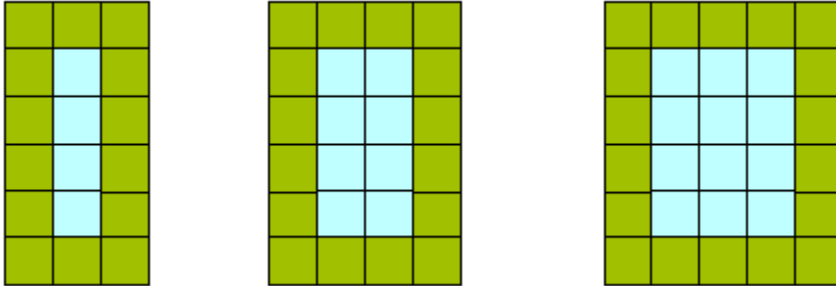


Building Patterns Constantly Copymaster 4

Here we have a series of buildings with green concrete squares and large (blue) square windows. There are three tasks to complete. One of these is to do with the green squares, the next is to do with the blue window squares, and the last looks at all of the squares. (You may find it helpful to make a table.)



Task 1:

By how much is the number of green squares changing from building to building?

How many green squares do we need for the eighth building?

How many green squares will we need for the hundredth building?

Can you write a rule for the number of green squares in any of these buildings, in terms of the number of the building?

Task 2:

By how much is the number of window squares changing from building to building?

How many window squares do we need for the ninth factory?

If there are 28 window squares how many green squares are there?

If we have to use exactly 36 green squares in making a building, how many window squares would we need?

Can you write a rule for the number of window squares in any of these buildings, in terms of the number of the building?

Task 3:

How many squares do we need altogether for the seventh factory?

What is the number pattern that we are getting for the total number of squares?

If we had 85 tiles, which numbered factory could we make?

*Which of these numbers is **not** a number of squares for one of these factories: 62, 63, 64, 65, 66?*

Can you write a rule for the total number of squares in any of these buildings, in terms of the number of the building?