1. Color the first 5 triangular numbers here:

 **5th**

triangular #

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| *# of blocks:* | *1* |  |  | *3* |  |  | *6* |  |  |  *10* |  |  *15* |  |
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 **4th**

triangular #

 **3rd**

triangular #

 **2nd**

triangular #

 **1st**

triangular #

2. When we combine 2 consecutive triangular numbers, we can build a square!



a) What square can you build with the 2nd and 3rd triangular numbers ? (they have 3 and 6 blocks respectively). Draw the square below.

b) What square can you build with t the 3rd and 4th triangular numbers ? (they have 6 and 10 blocks). Draw the square below.

1. 3 & 6 b) 6 & 10

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c) Can you put it in words?

* The 2nd and 3rd triangular numbers combine to build a square of size \_\_\_\_\_
* The 3rd and 4th triangular numbers \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* The 4th and 5thtriangular numbers \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

7. Challenge :

a) Can you find the 10th triangular number? (how many blocks in the 10th triangular #?) (Draw it or use any other method)



 \_\_\_\_\_\_\_\_\_\_

b) What is the sum of the 10th and 11th triangular numbers ? \_\_\_\_\_\_\_\_\_\_\_