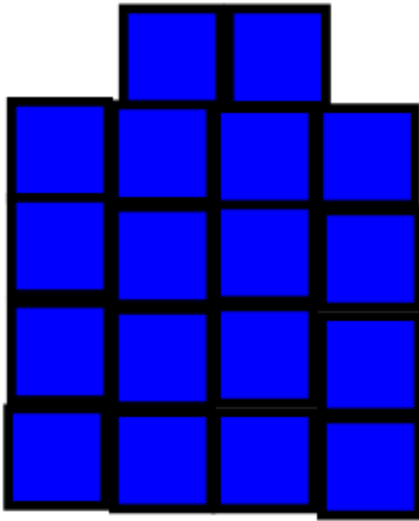




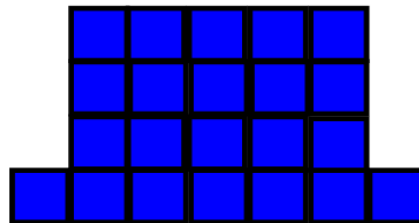
4<sup>th</sup> position

What is a possible rule for this pattern?

How would you build the 1st and 3rd positions in this pattern using your rule?

Can you think of another rule that would have the same arrangement of tiles in the 2nd position?

Is there a 3rd rule that would have the same arrangement of tiles in the 2nd position?



1 2 3 4 5 6

Why is this pattern different from the pattern we had initially?

What is a possible rule for this pattern?

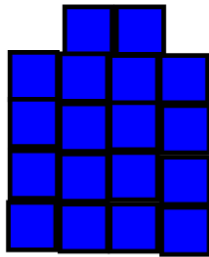
How would you build the 1st and 2nd positions in this pattern?

Can you think of another rule that would have the same arrangement of tiles in the 3rd position?

Is there a 3rd rule that would have the same arrangement of tiles in the 3rd position?

Choose a rule from the board.

Use your pattern tiles to build a pattern that represents a position in your pattern.



1 2 3 4 5 6

Your ~~partner~~ <sup>partner</sup> needs to guess which rule you have used.

Do not tell them if they have guessed correctly or not until they have built 2 positions in your pattern. E.g., if you have built position 5, they need to complete positions 4 and 6.

Once you have completed your 2nd pattern, please work on the following:

- \* Write an algebraic expression to represent your pattern
- \* Prove that your rule would work under any situation?
- \* Graph your pattern up to the 9th position