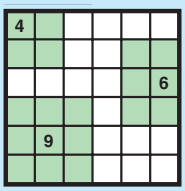
MOSAIC

Mosaic is a fascinating picture-forming puzzle. Each number tells you how many of the cells surrounding the number (and the cell containing the number) are to be filled in.

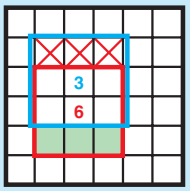
The Basic Principles of Mosaic

How many neighbours a numbered square has depends on where it is in the grid. A corner square has itself and three neighbours. A side square has itself and five neighbours. A central square has itself and eight neighbours. Note that the square containing a number is not necessarily shaded.



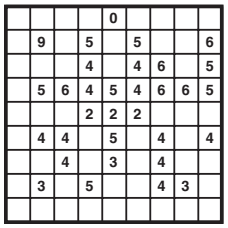
Use a light pencil to shade squares, so the numbers remain visible. They may be needed to decide the fate of neighbouring squares. Mark empty squares with an X. Knowing some squares are empty will help to determine which squares must be filled. In more advanced puzzles, you may need to consider more than one number at a time.

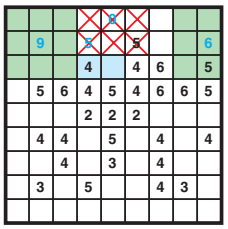
There are some useful pairs of numbers. For example, consider the red 6 and the blue 3. To complete the 6 without too many fills around the 3, the three squares beneath the 6 must be filled. Since three more of the cells inside the 6's area must be filled, we know that the three squares above the 3 must be empty.



Here's a basic guide to a small puzzle, illustrating the basic principles.

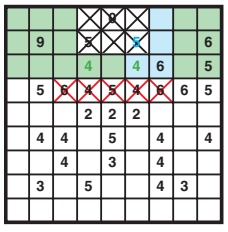
Follow the step-by-step guide and you'll begin to see why Mosaic puzzles are so compulsive.

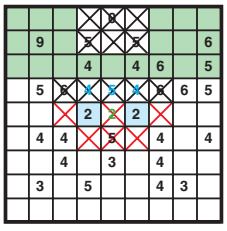




A Fill the nine cells in and around the blue 9. Cross through the cells in and around the blue 0. Fill the six cells around the blue 6. The only way to complete the blue 5 is with the two blue fills beneath it.

B The blue 5 can only be completed by filling all available squares (the blue fills). Both of the green 4s are complete, so their other squares can be marked as empty.

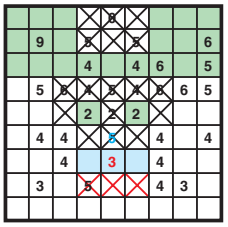


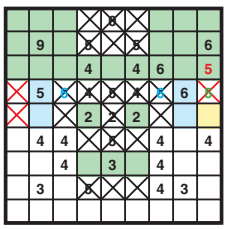


C To complete the blue 5, we must fill two squares. But both of the blue 4s only need one more fill. There's only one way to complete the 5 and give each of the blue 4s one fill. Now you can cross off the remaining empty cells for the blue 4s.

Once you've done this, you've completed the green 2, so you can cross off the other empty cells in and around it.

D The blue 5 is easy to complete. Once you've filled its cells, you've also completed the red 3, so the other cells belonging to the red 3 can be marked as empty.

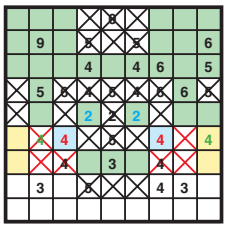


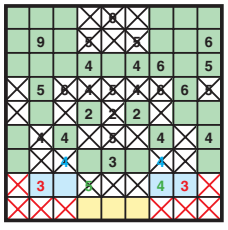


E To complete the blue 6s, all available cells must be filled (blue fills). When you've done this, you've completed the red 5. This means the cell beneath the red 5 must be empty.

To complete the green 5, the square beneath it must be filled (yellow fill).

F For each of the blue 2s, only one square is available, so each can be filled (blue fills). Once you've done this, you've completed each of the red 4s, so the other squares belonging to them can be marked as empty. To complete the green 4s, the available cells must be filled (yellow fills).





G To complete the blue 4s, the available cells must be filled (blue fills). Doing this completes the red 3s. The remaining cells for the red 3s can be crossed out. To complete the green 4 and the green 5, the available squares must be filled. The puzzle is now complete.