Here's a tiling with one of the "tetrominoes." (Your homework requires you to use pentominoes however!) The arrows outside the tiling indicate that the pattern clearly continues endlessly, in the same manner, horizontally and vertically.

The two blue arrows inside the tiling show two translations of the tiling. The red dots are the centers for 180 degree rotational symmetries. That may be clearer from the diagram to the right:

In this tiling with the same tetromino, the blue arrows again show translation symmetries. The green dotted line shows a reflection line. The red dots show centers of 180 degree rotational symmetries. Note that this tiling does have reflection unlike the one above!