

## Hints for 4.2 Black and White

- Here are a couple of hints to help solve these grids:
  - Each grid must decompose to the following set of strips: BBB, WWW, BWB, WBW, BBW, WWB, BB, WW, BW and finally one of B or W.
  - You can tell which of the B or W singletons must occur in each grid by the number of black and white squares present. Across this entire puzzle there are 13 occurrences of black singletons and 12 occurrences of white singletons.
  - Look out for strips that can only be formed in one unique way. In particular the BBB or WWW strips are often easy to spot, but the BWB or WBW strips might also have unique placements.
  - For all grids, in addition to the BBB and WWW strips, you must retain two instances of adjacent blacks (one for the BBW strip, the other for the BB strip) and two instances of adjacent whites (for the WWB and WW strips). If you fall short of this requirement, you can backtrack early.
  - All grids have unique solutions. You can sometimes use this knowledge to your advantage (for instance, a vertical BB strip cannot be next to a vertical BW strip since this would imply a second solution exists with horizontal BB and BW strips instead)
- Repeating...across this entire puzzle there are 13 occurrences of black singletons and 12 occurrences of white singletons...and the entire puzzle is laid out as a 5x5 arrangement of grids.
- The letters of the singletons in each grid spell a message, but you can also combine them in a different way to get one final grid that you need to solve.