## Whip-It Towers


a.k.a Genius Puzzle
( 3 section, 6 column tower is $1.75^{\prime \prime}$ by $2.75^{\prime \prime}$ long with $5 / 8^{\prime \prime}$ tiles, 3 section, 6 column Genius tower is $1.75^{\prime \prime}$ by $2.8^{\prime \prime}$ long with $5 / 8^{\prime \prime}$ tiles, 3 section, 6 column keychain tower is $1.75^{\prime \prime}$ by $2.75^{\prime \prime}$ long with $3 / 4^{\prime \prime}$ tiles, 2 section, 6 column custom made tower is $1.75^{\prime \prime}$ by $2^{\prime \prime}$ long with $3 / 4^{\prime \prime}$ tiles 4 section, 6 column keychain tower is $1.25^{\prime \prime}$ by $3^{\prime \prime}$ long with $1 / 2^{\prime \prime} \times 3 / 8^{\prime \prime}$ tiles, 4 section, 6 column keychain tower 2 is $1.25^{\prime \prime}$ by $2.25^{\prime \prime}$ long with $3 / 8^{\prime \prime}$ tiles, 6 section, 6 column tower is $2^{\prime \prime}$ by $4.75^{\prime \prime}$ long with $3 / 4^{\prime \prime}$ tiles)

These puzzles consist of a number of sections that can rotate; the puzzle is solved when each column has a single color. One color has one fewer tiles than the others, and this gap is what allows pieces to be moved around. Because all tiles of a given color are identical, solving is relatively easy; any tile can effectively be moved to any position without disturbing the others, with any assignment of colors to columns, one tile at a time (larger versions just take longer). When the number of number of sections and columns is the same, a second problem is to put the same color tile in each row.

## Further reading:

Jaap's Page, from: http://www.geocities.com/jaapsch/puzzles/tower.htm

