

PASCAL'S TRIANGLE FACTORED COLORING SHEET, created by Sondra Eklund, Sonderbooks.com

## ABOUT THE CHART:

Print this in Landscape mode for best results.
This is Pascal's Triangle. Each entry in the chart (heavy lines) is the sum of the two entries underneath it, but in this chart I've factored every entry to its prime factorization. This matches the two shawls I've knitted, which you can see at www.sonderbooks.com/sonderknitting/

You can color this chart as a color-by-number and see the interesting patterns that develop.
It's interesting that no prime factor shows up until its row in the chart. For example, you don't have any factors of 5 until the $5^{\text {th }}$ row. You don't have any factors of 13 until the $13^{\text {th }}$ row.

On a prime number row, every entry has that number as a factor. For example, all the entries in the $5^{\text {th }}$ row have 5 as a factor. All the entries in the $13^{\text {th }}$ row have 13 as a factor.

Because of the distributive law and the way Pascal's Triangle is constructed, if the two entries below a number have a certain factor, that number will have the factor, too. So the colors for primes show up in inverse triangles. (Try it and see!)

Look for more charts at www.sonderbooks.com/sonderknitting/

