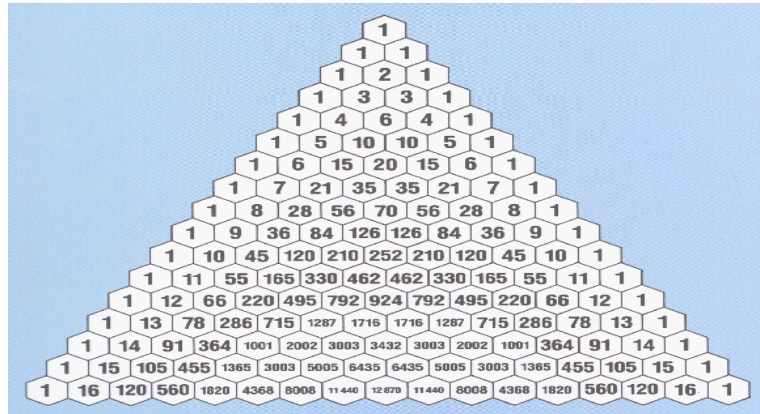
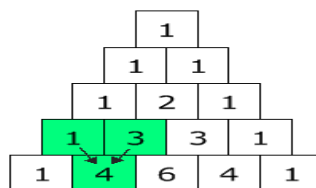

Pascal's Triangle



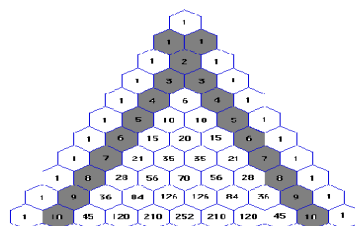
In grade 6, in maths, Toby Reynolds, Callan Dahmes and Otis Harley have been focusing on Blaise Pascal, a famous French inventor, mathematician, physicist and religious philosopher, and Pascal's Triangle. Pascals Triangle (The picture above), is where the two numbers above make the number below.



We found lots of patterns in pascals triangle.

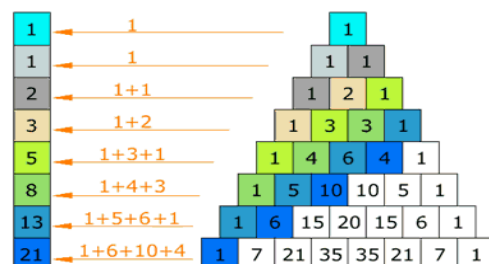
1. Counting numbers

The second diagonal row going down are counting numbers (1, 2, 3, 4, 5, ect).



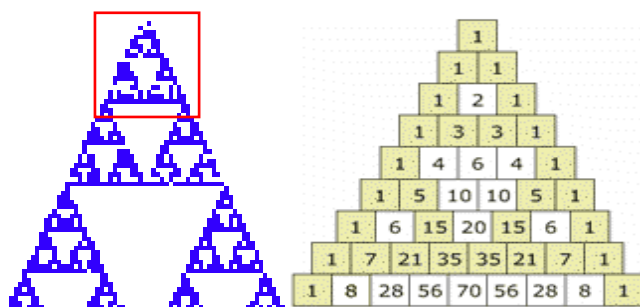
2. Fibonacci sequence

Each diagonal row equals the Fibonacci numbers.
The Fibonacci numbers are where the number before it plus the number equals the next number.
Eg. $1+1=2$, $1+2=3$, $2+3=5$, $3+5=8$, $5+8=13$.



3. Sierpinski triangle

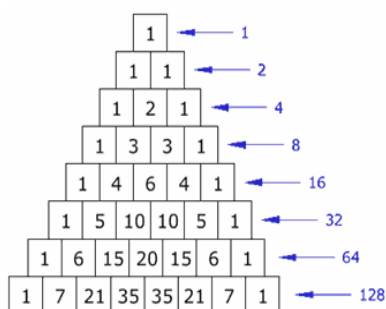
When you fill in odd and even on Pascals triangle, it makes the same pattern as the Sierpinski triangle*. The red square represents the pattern that is shown.



*The Sierpinski triangle is a pattern made of triangles.

4. Row sums

The sum of each row doubles each row down.



Interesting fact: if you continue this pattern 20 times, you get 1,048,576!

Blaise Pascal

Blaise Pascal was born in 1623, in France. His mother died when Blaise was very young. His father was a mathematician and wanted to teach Blaise maths by his self. In 1640s Blaise invented an early calculator. He also invented a primitive wrist watch. He experimented

with atmospheric pressure could be estimated in terms of weight. Blaise died in 1662. He was only 39 years old.