

The Golden Spiral

Fibonacci's Golden Spiral is one of the most recognizable ways to see the relationship of this mysterious skip pattern's numbers. Once you're clear on how the pattern unfolds ($a+b=c$, $b+c=d$, $c+d=e...$) this fun art project is a snap! You'll need colored grid paper, scissors and something to put it all together on!

Step One:

It all starts with the first number in the Fibonacci Sequence, 1. Cut out a perfect square that's one unit by one unit. This will become the foundation of your design.


Step Two:

Now build the second number, also a 1. Place it to the right of the first one

Step Three:

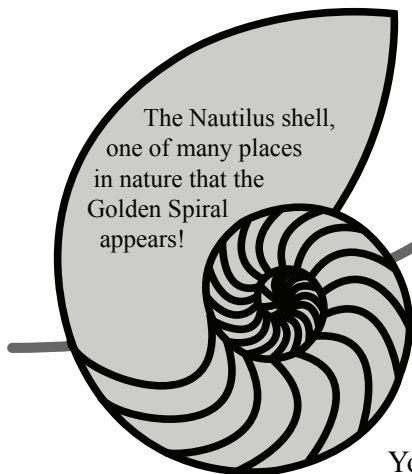
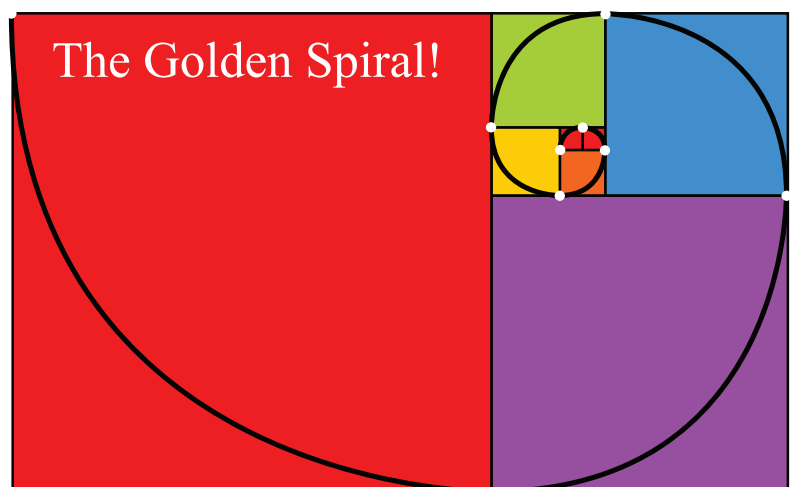
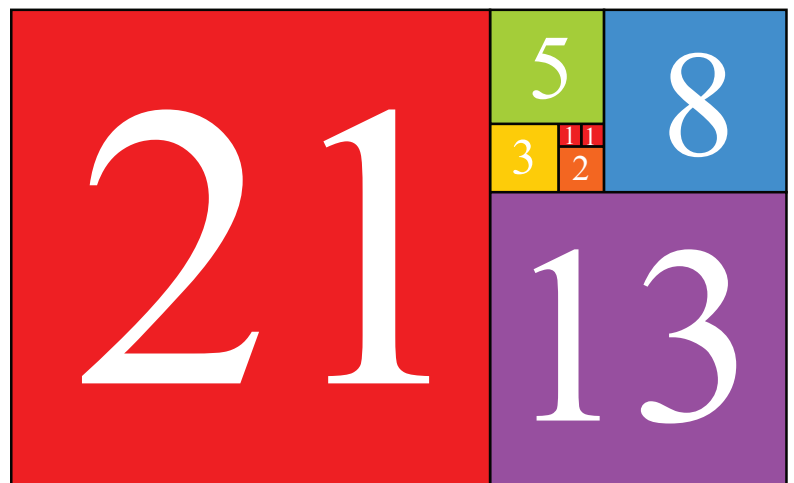
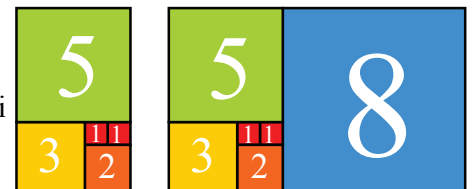
This time, build a 2x2 square and place it below your other pieces.

Step Four:

 Build a 3x3. Keep adding each additional shape in a clockwise direction!

Step Five:

Keep on building! Make sure each additional number you build is in the real Fibonacci Sequence and that you add it in a clockwise direction!



The Nautilus shell, one of many places in nature that the Golden Spiral appears!

Step Six:

You can continue this process as long as you please! Just remember to keep adding onto your Fibonacci rectangle in a clockwise direction. For instance, a square that's 34x34 would go on top of the current arrangement!

Step Seven:

Now start in the corner of the first single unit square. In a clockwise motion, carefully draw a continuous curved line that passes through each new square's corners. You're left with the mysterious Golden Spiral! In what other natural forms have you seen this mysterious shape? You'll be surprised how often you find it!