Round 2 · Lesson 4 · Sacred Geometry

The Patterns Behind It All

By the end of this lesson, you can name the Fibonacci sequence, the golden ratio and the Seed of Life, and you can tell real math from myth.

About 20 minutes All ages Round 2

Part 1 · Read (5–8 min)

The big idea

Nature keeps using the same few shapes and numbers. People have been amazed by that for thousands of years.

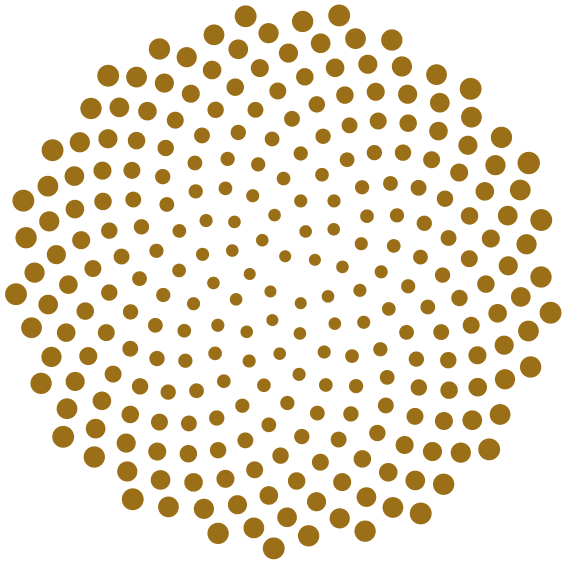
"Sacred geometry" is the name for shapes and patterns that many cultures saw as having deeper meaning. Some of it is real, measurable math. Some of it is symbol and meaning. **We'll keep the two clearly labeled.**

1. The Fibonacci numbers

Real math

Start with 1 and 1. Add the last two numbers to get the next: **1, 1, 2, 3, 5, 8, 13, 21, 34, 55…**

Count the spirals in a sunflower head and you'll usually get two numbers next to each other in that list, like 34 one way and 55 the other. Pinecones often show 8 and 13. Here's why: each new seed grows at the same turn from the last one (about 137.5°), and that turn packs the most seeds into the least space.

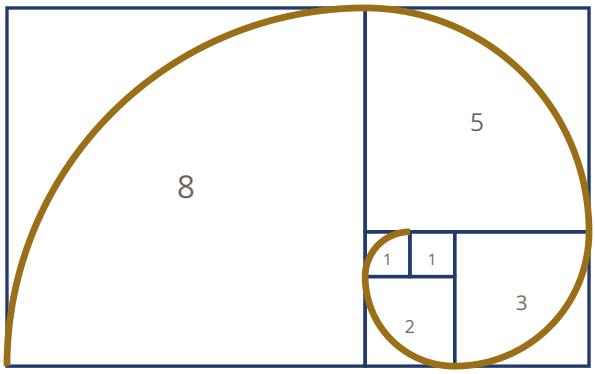


Every dot is placed at the same 137.5° turn. The spirals appear on their own.

2. The golden ratio

Real math

Divide any Fibonacci number by the one before it: 8 ÷ 5 = 1.6, 13 ÷ 8 = 1.625, 55 ÷ 34 = 1.6176… The answers close in on **1.618**, called the golden ratio. Build squares with Fibonacci sides and draw a curve through them, and you get the famous golden spiral.



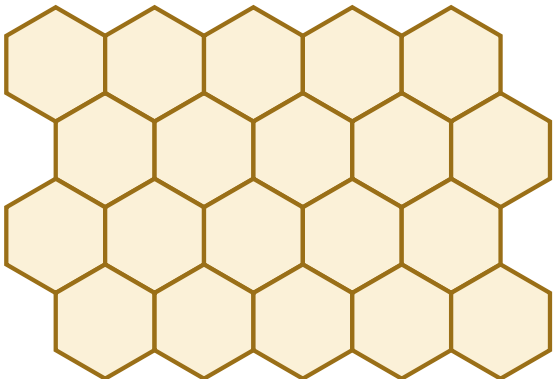
Squares of 1, 1, 2, 3, 5 and 8, with a curve drawn through them.

Myth check. You'll hear that the Parthenon, the Mona Lisa, the perfect human face and every seashell follow the golden ratio. Careful measurement doesn't back most of that up. The nautilus shell, for example, is a beautiful spiral, but not usually a golden one. The real patterns are amazing enough without stretching them.

3. The hexagon

Real math

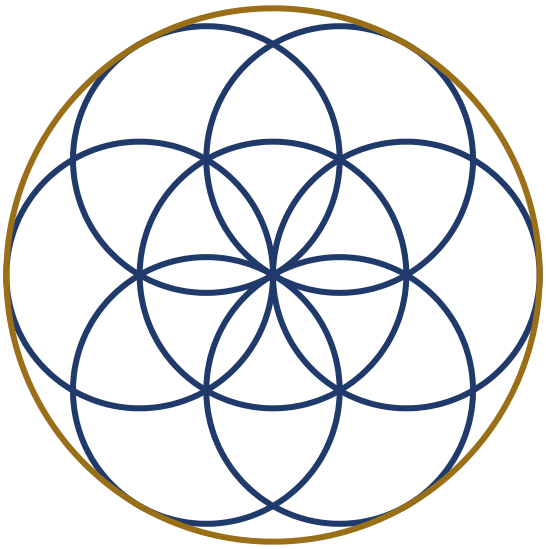
Bees build with hexagons because six-sided cells fit together with no gaps and use the least wax for the most space. Nature finds the efficient shape.



4. The Seed of Life

Symbol & meaning

Draw one circle. Then draw six more of the same size around it, each centered on the edge of the first. That's the Seed of Life. Keep going and it grows into the bigger pattern called the Flower of Life, which has been drawn and carved in many cultures. People have read it as a picture of creation, unity, or how one thing becomes many.



The Seed of Life: seven equal circles.

What this teaches you

Last lesson: *as above, so below.* Sacred geometry is that idea you can see. One simple rule, repeated (add the last two numbers, turn 137.5°, draw the same circle again), builds something complex and beautiful. **Your life works the same way.** One small rule, repeated daily, builds a pattern you'll be proud of years from now.

Part 2 · Practice (10 min)

Go find it

Take 10 minutes outside or in your kitchen. Look for spirals, hexagons and branching patterns: pinecones, pineapples, flowers, a head of cauliflower or romanesco, a cut onion, leaves on a stem. Take photos.

What I found	Pattern	Real math or meaning?

Bonus: draw your own Seed of Life with a cup, a coin or a compass. Seven circles, all the same size.

Part 3 · Check yourself

3 quick questions

1. What comes next: 1, 1, 2, 3, 5, 8, 13, ...

- 18
- 21
- 26

21. 8 + 13 = 21.

2. Dividing neighboring Fibonacci numbers gets closer and closer to:

- 3.14
- 1.618
- 2.0

1.618. That's the golden ratio.

3. Which of these is a well-supported fact?

- The Mona Lisa is built on the golden ratio
- Sunflower spirals usually come in Fibonacci numbers
- Every seashell is a golden spiral

Sunflower spirals usually come in Fibonacci numbers. Sunflowers really do it. The other two are popular myths.

Part 4 · Try it this week

Your real-life task

Pick one tiny "rule" to repeat every day, like a Fibonacci step: one page read, one dollar saved, one push-up added. Write it down. Repeat it daily and watch the pattern build.

Next: Vibration

Nothing rests. How energy, mood and the people around you move through your life.