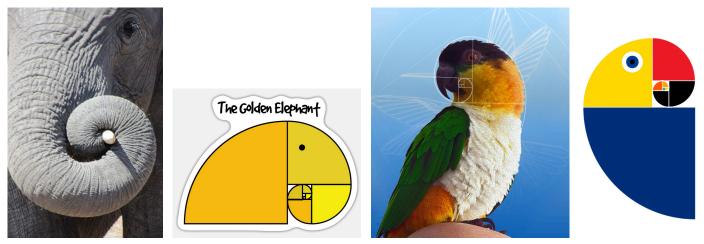


Happy Fibonacci Day! 11/23 Math Maker Circle

What are we making? Our own sequences and Fibonacci art.



Images: Alex21, u/timecapture, kooky love

Pathways

#40 Sequences, Series, Summability #51 Geometry #68 Computer Science



Send your creations, stories, and questions to reach.out@naturalmath.com or text 919-388-1721.
We answer every message.



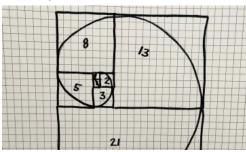
Math Makers Circle is an informal learning space where we make mathematics accessible to everyone in kind ways. Everyone makes a mathematical object in their own way and helps their math friends make theirs, unlocking pathways into various mathematics subjects. https://msc2020.org/

Guideposts

<u>What will we make?</u> Make your own **sequences** out of counters. Create visual art based on the popular **Fibonacci sequence**. Superimpose whimsical cartoons or abstract designs on the **Fibonacci spiral** to develop both number sense and geometric intuition. Build hands-on models of **recursion** for a taste of unplugged computer science.

<u>Interesting choices?</u> Choose to make a **random** sequence or build your sequence on a **predictable** rule or pattern. Use **counting** and algebra or **measuring** and geometry to make the Fibonacci sequence with beads or squares. Go on scavenger hunts for sequences in nature and culture, or design your own. What will you **name** your sequences?







Images: Almost Unschoolers, She Loves Science

What will we explore? Time to check out the mathematical implications of your choices!

- Is your sequence random or rule-based? If it has rules, what are they? Is it decreasing, increasing, or neither?
- Connect the geometric model and the bead model of the Fibonacci sequence through its recursive formula. Try to find recursive formulas for your own sequences.
- Share stories about the Silk Road. Fibonacci is the nickname for a
 12th-century trader and mathematician. He loved the Hindu-Arabic
 number system, which he learned in North Africa from Silk Road
 merchants. Back in his home country, Italy, he published a big math
 book about that system. One of the most popular chapters in that book
 was about a sequence he was taught along the way.

