Natural Math

Pi is Calculus! Happy Pi Day (Tau is Invited)

PATHWAYS
#26 Real Functions
#28 Measure and Integration
#51 Geometry

Family Math Circle ~~~ Pi Day 2024

Pathways name our math inspirations using Mathematics Subject Classification. Mathematicians around the world label their work with library codes from MSC, https://msc2020.org/ Let us help students feel happy familiarity with each subject area!

Family Math Circle is an informal learning space where participants make advanced mathematics accessible to everyone in kind ways.

Photo: Natural Math

What Will Everyone Make?

Roots and wings: Make models. Make connections.

Make approximate circles out of blocks or strips that are easy to measure, and use your creations to approximate Pi. Drop strips onto floorboards, making a random number generator that approximates Pi.

Words With Math Friends

Tell friends and family all about your math creations. Use these terms +"math" to find images, videos, and articles on the web.

- Pi, Tau
- Circle, center, circumference, radius, diameter, perimeter
- Length, ratio, irrational numbers
- To sketch, construct, estimate, approximate, calculate
- Sequence, series, limit
- Paradox, counter-intuitive fact

Add your family's own words to the Research Journal. Use these personal terms along with the standard terms.

Interesting Choices

Mathematicians do many different things. What kind of math person will you be today?

Do you choose to work with Pi or Tau? Do you prefer mathematical proofs or engineering estimates? Will you find ready-made circles (there are many around!) or make your own? How closely will you approximate your Pi?

These are starter choices. You will come up with more ideas. Add them to the Research Journal.

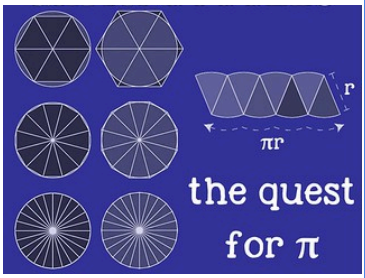
Toolbox

Physical (gray=optional): Paper, colored pencils, scissors, tape or glue, compass, rulers, yarn, round objects to trace.

Virtual:
https://naturalmath.com/2023/02/pi-day-jokes-for-natural-math-circles/
https://www.ventrella.com/Buffon/

https://naturalmath.com/circles/

Extra activities, videos, math connections, books, and other resources for math circle leaders.



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IS WHAT YOU MAKE IT!

▸▸▸ Name _ _ _ _ _ _ _ _ _ _ _ _ _ _ ◂◂◂

Words ~ Examples ~ Questions ~ Problems ~ Stories ~ Conjectures ~ Models ~ Art ~ Formulas ~ Graphs ~

▸▸▸ Research Journal ◂◂◂