NUMBERS IN NATURE AMIRROR MAZZE

NOW ROURING



traveling exhibitions

INFINITE AMAZEMENT

Patterns surround us in nature. They'll tell you how our planet works, if you know where to find them. They form the veins of a leaf, the spiral of a nautilus, and the spots on a giraffe. Patterns also inspire human creation: some arrangements just ... feel right. The key to unlocking these patterns is math. *A Mirror Maze: Numbers in Nature*, an interactive and immersive exhibit created by the Museum of Science and Industry, Chicago, is the solution for those who say math "isn't their thing."

ONCE YOU START TO NOTICE ALL THE PATTERNS AROUND YOU, IT CAN BE HARD TO STOP.

DO THE MATH, SEE THE PATTERNS:

Guests will pass a display of images from nature and hidden patterns will emerge. They'll see more examples in a largescreen film. When they enter the mirror maze, they'll literally step inside a massive pattern: a dizzying, seemingly infinite sea of triangles to navigate and find the secrets inside ... including the way out. The journey is completed in an interactive gallery where they'll uncover the patterns in their own bodies and in centuries of music, art and architecture.

IT'S AN EXPERIENCE OF MATH THAT IS HARDLY BY THE NUMBERS. Where else could guests explore math and

science as they laugh and feel their way through a maze? *Numbers in Nature* will change the way they look at the world and have them falling in love with math without the calculator! $\begin{array}{c} 1 & 3 \\ 1 & 2 & 1 \\ 1 & 3 & 3 & 1 \\ 1 & 4 & 6 & 4 & 1 \\ 1 & 5 & 10 & 10 & 5 & 1 \\ 1 & 6 & 15 & 2 & 15 & 6 & 1 \end{array}$

A number pattern is a series of numbers that occur in a predic way, like this Pascate mat

* The mirror maze was such a hit for our kids we went through it again and again.

– EXHIBIT GUEST

Height: 4'7"

(1.41m)

Having long helps swimi through w

<u>410</u>

EXHIBIT HIGHLIGHTS







IMMERSIVE THEATER: A large-format, four-minute film reveals the elegance and universality of patterns in nature. Stunning images are overlaid with animation to reveal the mathematical patterns beneath, including the Golden Ratio, spirals, fractal branching and Voronoi patterns.

GET LOST IN THE MAZE: The enthralling centerpiece of this math lesson is a giant mirror maze a sea of equilateral triangle chambers that will make you feel like you've stepped into a kaleidoscope. The mirror maze itself is a pattern, combining several characteristics of geometric patterns: repetition, symmetry and tessellation. Unexpected dead ends trigger intriguing questions, and a hidden chamber provides more surprises. **FIND THE PATTERNS AROUND YOU:** A gallery of fun hands-on activities allows guests to spot patterns in music, art, architecture and even their own bodies.

- An interactive mirror compares a guest's body proportions to the Golden Ratio. They'll also test their face for symmetry—and might be surprised just how different they'd look if both sides were exactly the same!
- Manipulate computer-based landscapes to learn how fractals are used in animation.
- Control 3-D models and explore patterns in natural objects like a pinecone or tortoise shell.
- Identify mathematical patterns in music and learn how composers employ patterns by creating chords of your own.



SAMPLE EXHIBIT FLOORPLAN

"This exhibit is a great way to make math accessible and relevant to young minds." - EXHIBIT GUEST



HOSTING REQUIREMENTS

Size: 6,000 to 8,000 square feet, modular.

MARKETING RESOURCES

With the exhibition rental, institutions will receive a robust kit of marketing resources created by the Museum of Science and Industry, Chicago.

EDUCATIONAL MATERIALS

Created to support the Next Generation Science Standards, teacher field trip resources and online programming will offer valuable in-depth content tailored to student audiences.

EXHIBIT TOUR

FEBRUARY 2018 – APRIL 2018 Boston Museum of Science

JUNE 2018 – SEPTEMBER 2018 Arizona Science Center

OCTOBER 2018 – JANUARY 2019 Las Vegas Springs Preserve

FEBRUARY 2019 – SEPTEMBER 2019 Contract Pending

FALL 2019 AND BEYOND Available for booking

CONTACT

ANNE RASHFORD anne.rashford@msichicago.org (773) 947-3743 **JEFF BUONOMO** jeff.buonomo@msichicago.org (773) 753-1355



museum of science+industry chicago

msichicago.org/travelingexhibitions