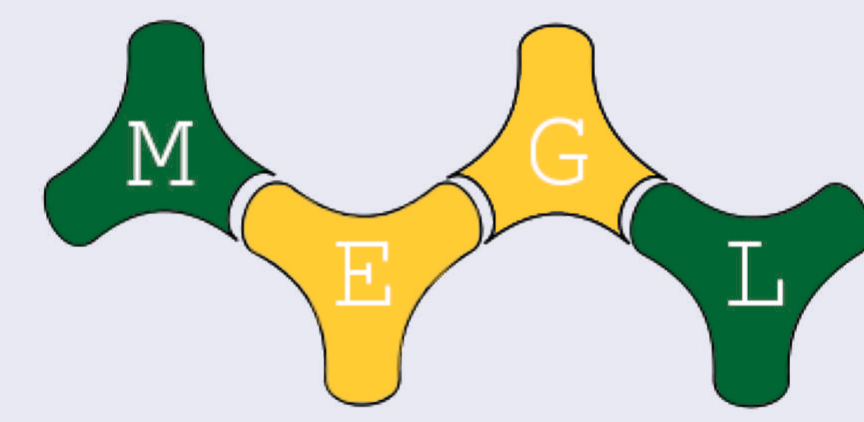


Spring 2024 Outreach Team

Joanne Romo, Oluwatomisin Badmus, Nathaniel Marshall, Mark Dubynskyi
 Outreach Director: Dr. Ros Toala



Mason Experimental Geometry Lab



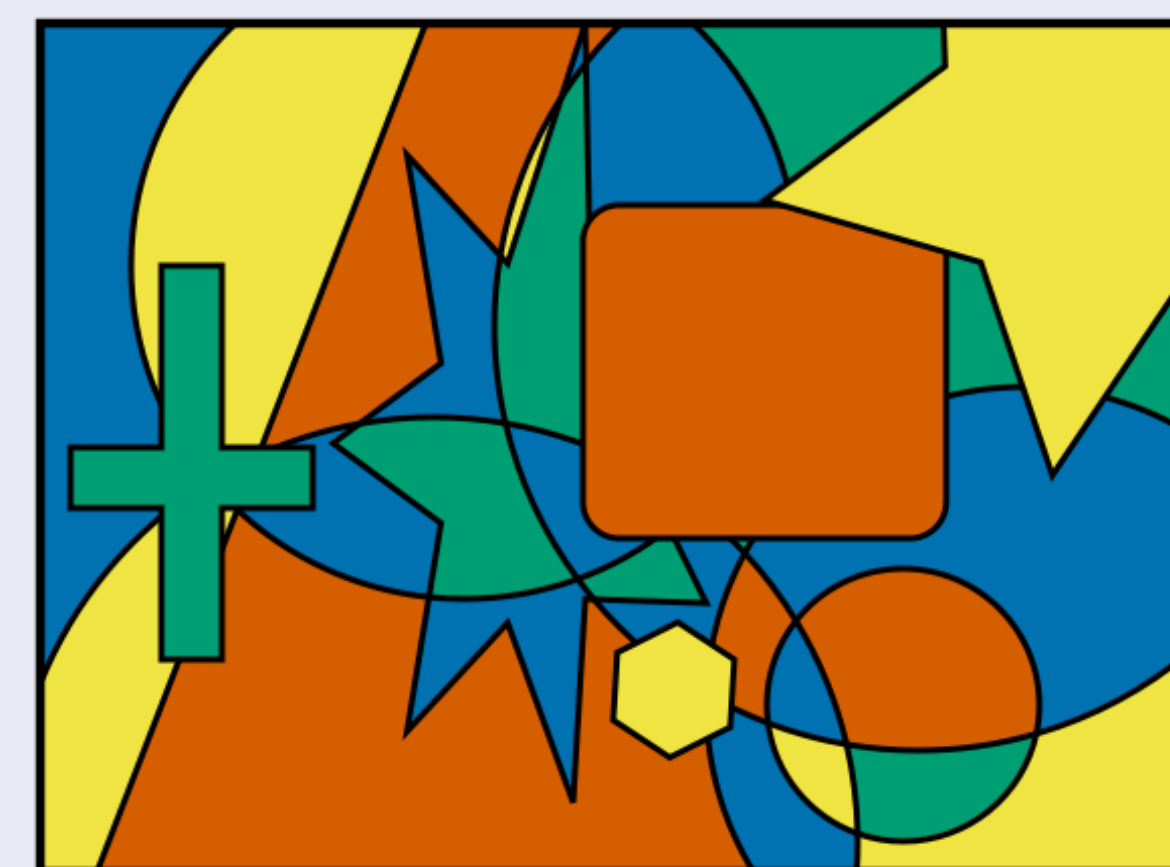
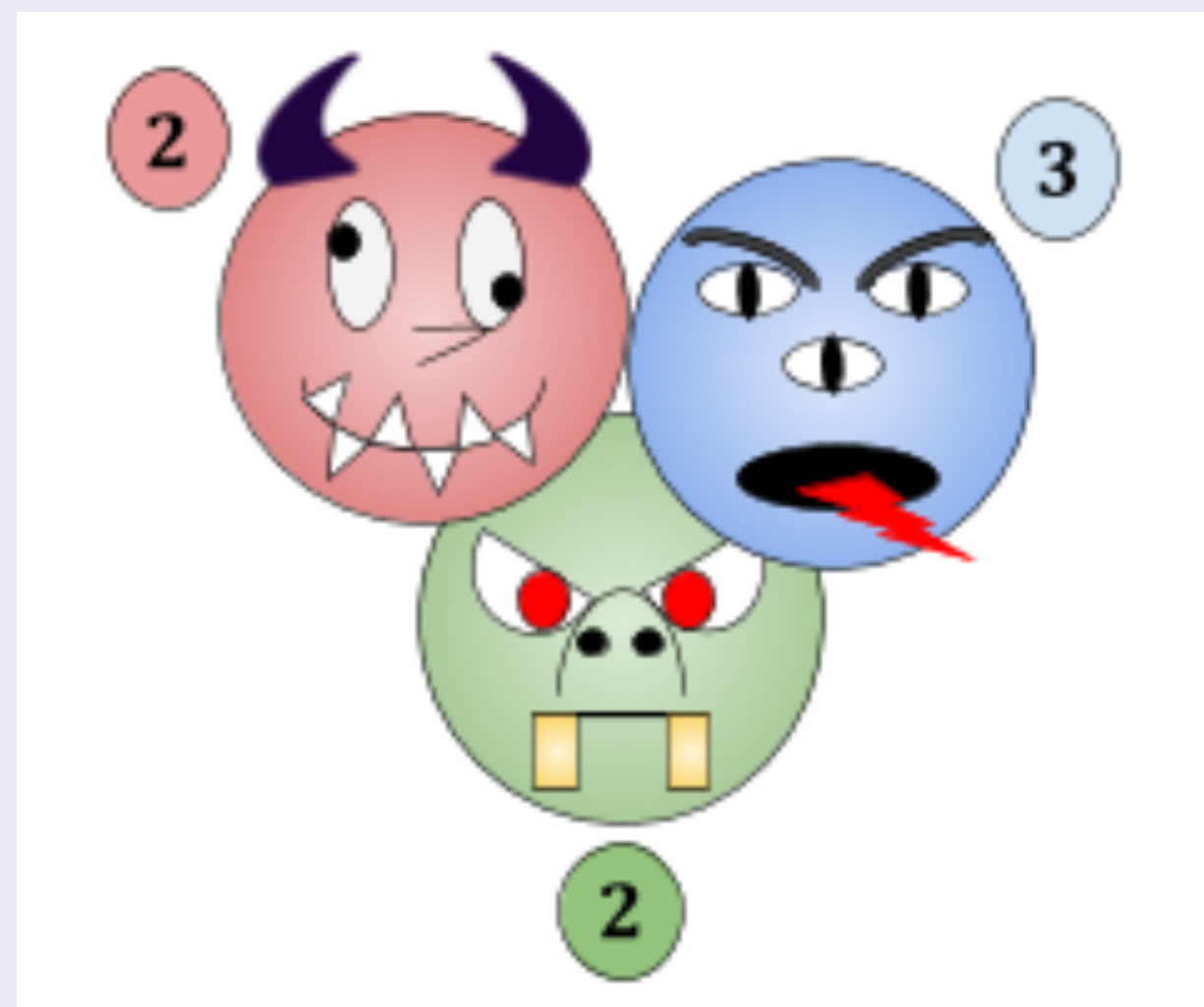
May 5, 2024

Introduction

This semester we welcome two new Outreach members, have developed a new activity and are improving some older ones.

Activities

- Polygons, Tilings and Maps
 - Classifying shapes
- Quantum Computing
 - Efficient algorithms
- You Can Count on Monsters
 - Prime factorization
- Really BIG Numbers
 - Linear, polynomial, exponential, and factorial growth
- Your Teachers are Lying to You
 - Context matters in mathematics
- Playground of the Infinite
 - Hilbert's infinite hotel
- Snowflake Symmetry
 - Group theory
- Hyperbolic Crochet
 - Hyperbolic geometry
- Irrational Thinking
 - Irrational numbers
- **Bubbles NEW!!**
 - Topology

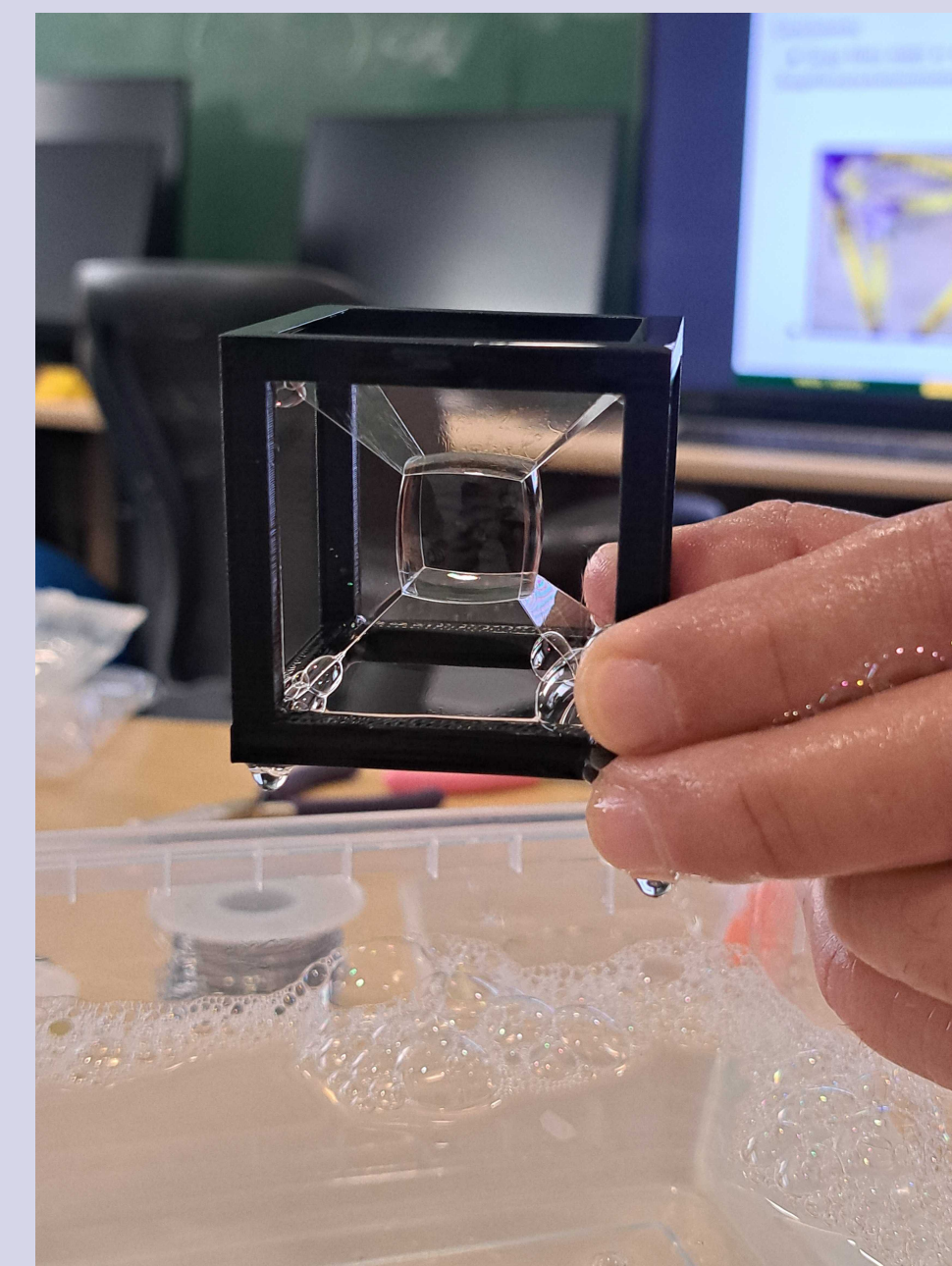


Accomplishments

New 5th through 8th Grade Activity

Bubbles

- Introduces the concept of shapes and surface tension to elementary and middle school children.
- Uses soap film to explain how to minimize surface area.
- Utilized 3D printed polyhedrons from the lab to explore topology and geometry.
- Has one upcoming activity this month!



Students Reached

- We are always in the process of developing new activities.
- This semester we reached over 450 students in the age ranges between 6 to 14.
- We are also trying to get involved with tutoring institutions and after-school programs to promote our work.

Photos



Accomplishments

- Two of the members have been able to give presentations for the first time!

Future Goals

- Reach more students and target more secondary school students with our new activities.
- Create more follow-up lessons.
- Find ways to make the booking process more efficient.
- Encourage more students to take part in MEGL Outreach.

One More Potential New Activity

- Game Theory

More Pictures

