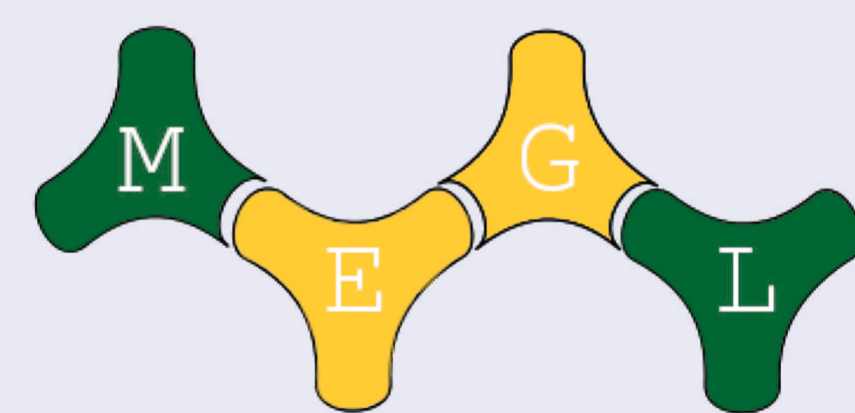


Fall 2020 Outreach Team

Dr. Harry Bray, Susan Tarabulsi, Aidan Donahue



Mason Experimental Geometry Lab



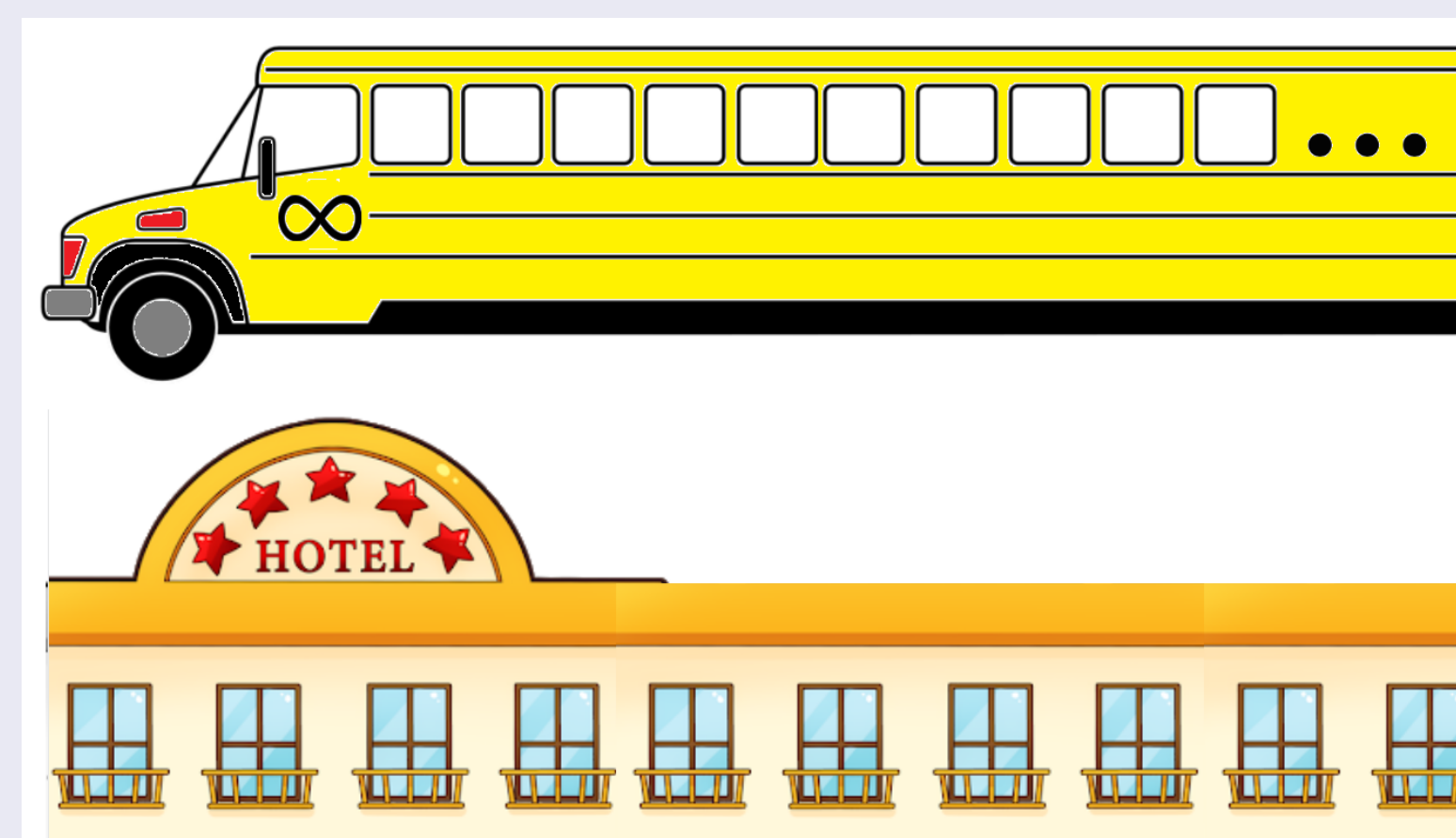
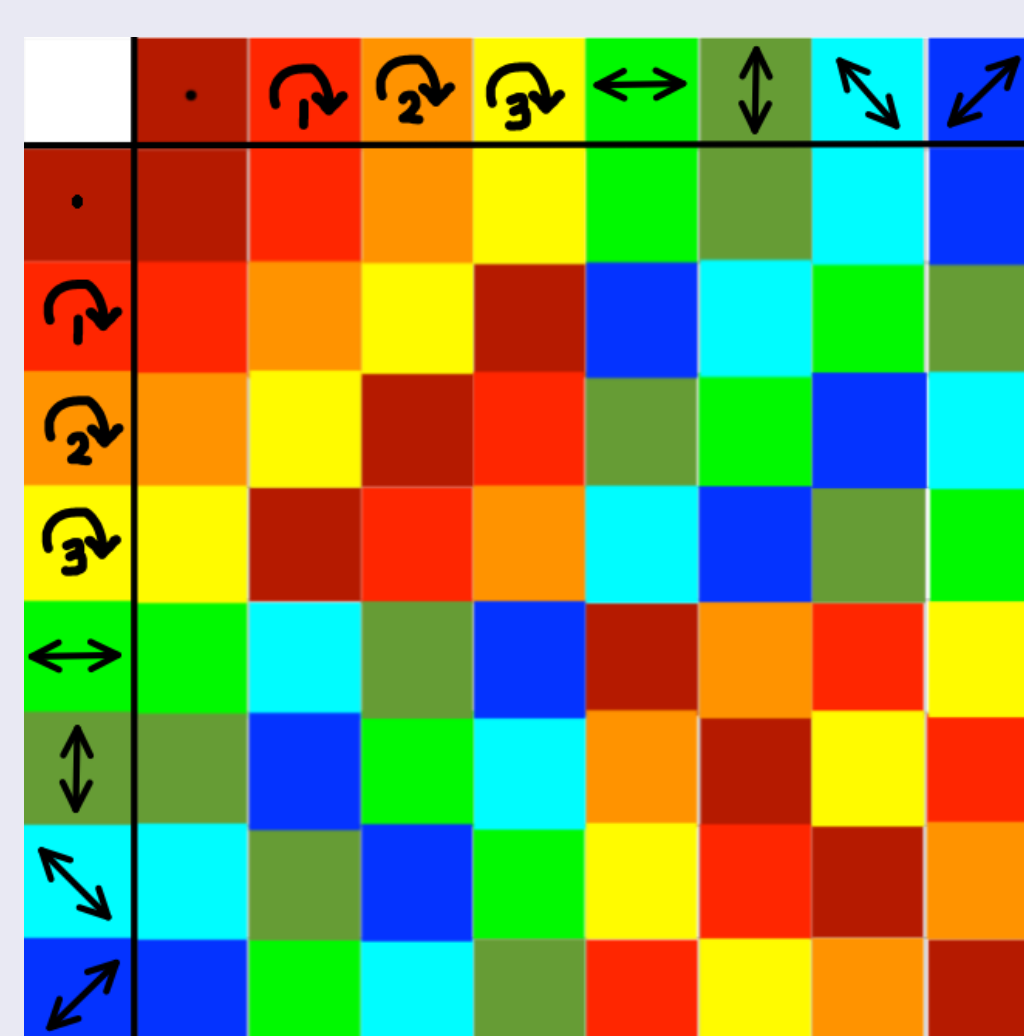
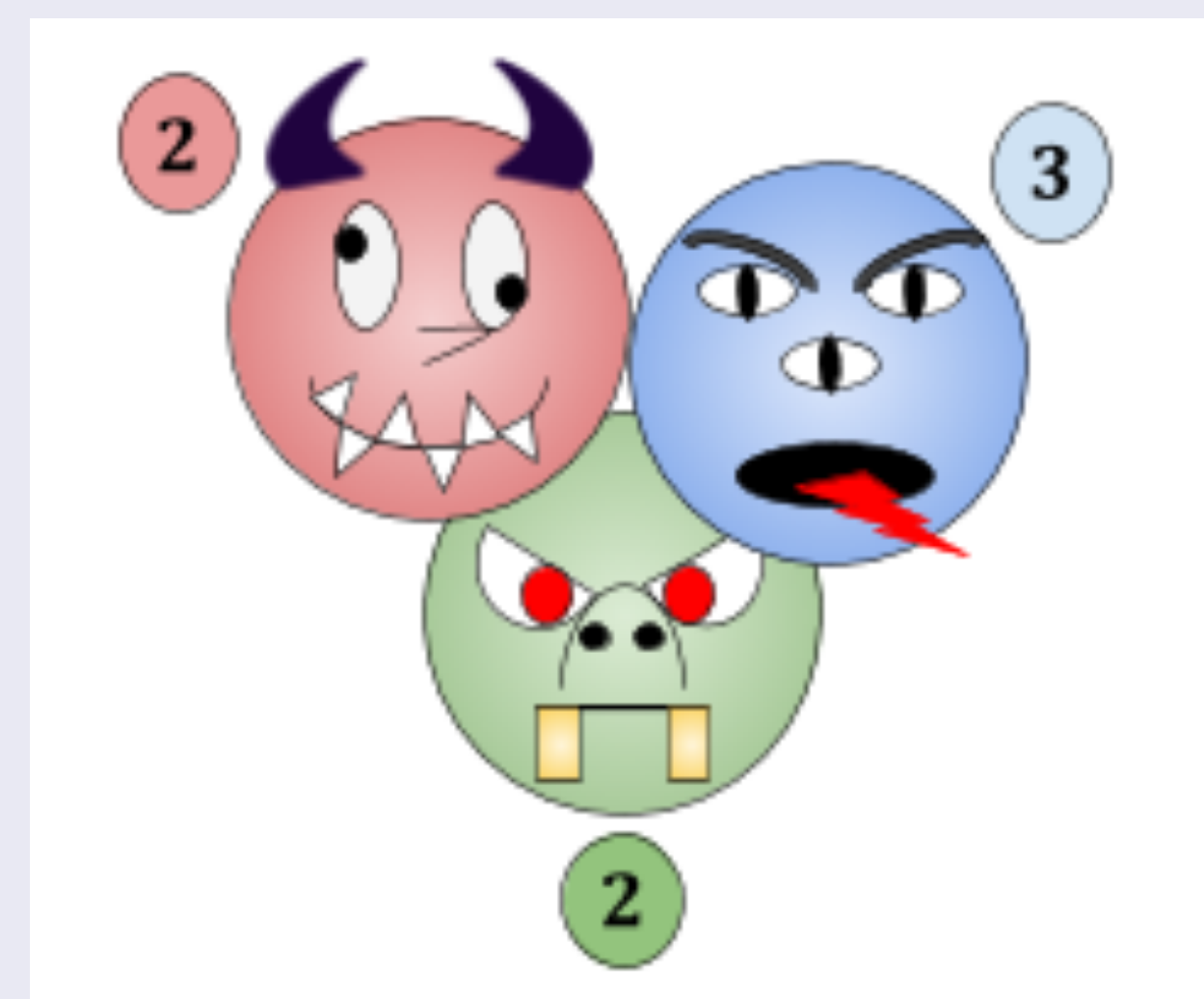
December 4, 2020

Introduction

This is the first semester we fully operated online. We were successfully able to overcome the challenges of virtual learning to engage students and get them excited about math. It is our second semester of having an outreach team and we welcomed our new outreach director, Dr. Bray! Our main focus this semester was to get in contact with schools and continue our work from last semester by converting activities online, as well as refining them in the process.

Activities

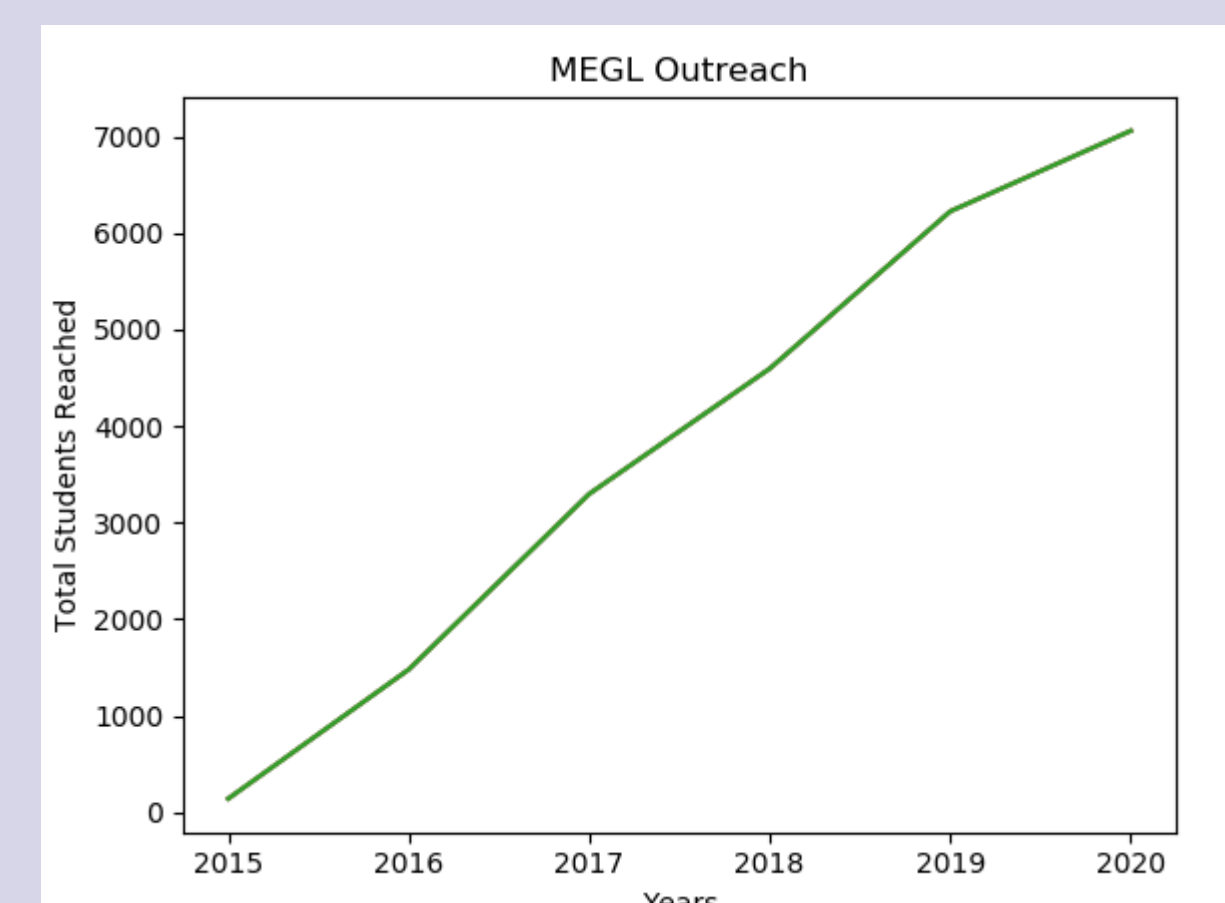
- You Can Count on Monsters - **Online!**
 - Prime factorization
- Really BIG Numbers - Online!
 - Linear, polynomial, exponential, and factorial growth
- Your Teachers are Lying to You
 - Context matters in mathematics
- Playground of the Infinite - Online!
 - Hilbert's infinite hotel
- Snowflake Symmetry - Online!
 - Group theory
- Hyperbolic Crochet
 - Hyperbolic geometry



Accomplishments

Expanded Our Community

- Number of students reached:
 - Elementary Schools:
 - 151 students reached virtually

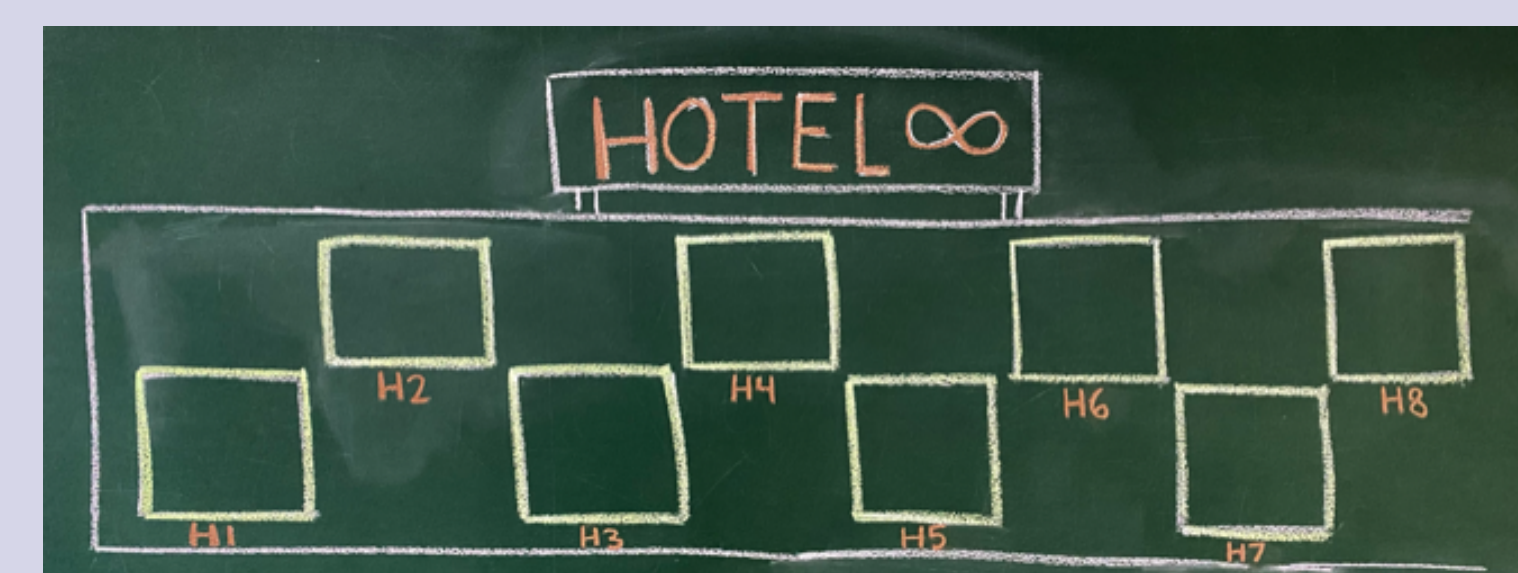


Still more students to reach this semester!

Virtual Learning

Due to the shift to online learning, we've adapted a number of our talks to an online format. All five of our regular talks have an online option!

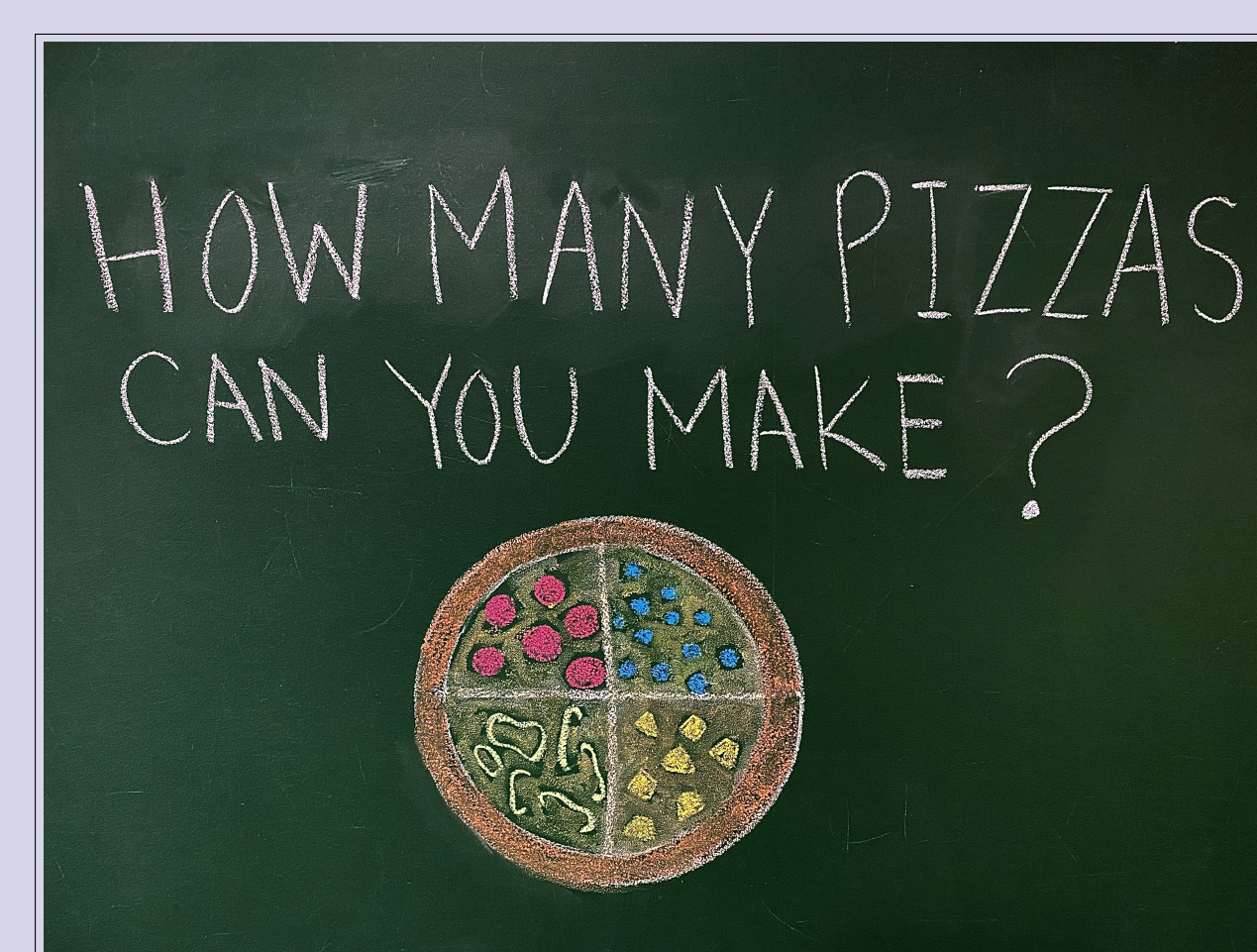
- Online You Can Count on Monsters
- Really Big Numbers
- Your Teachers are Lying to You
- Playground of the Infinite
- Snowflake Symmetry



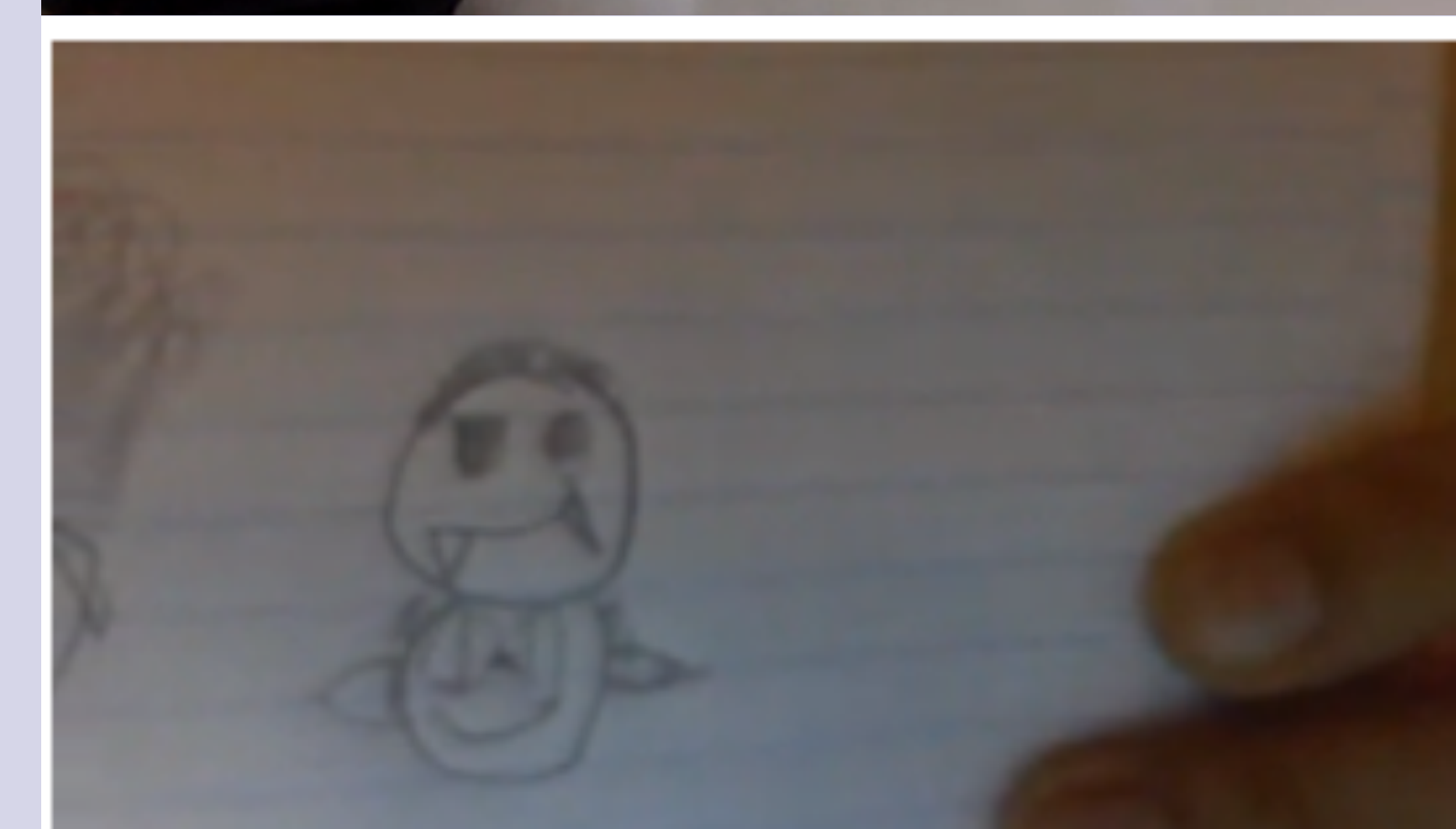
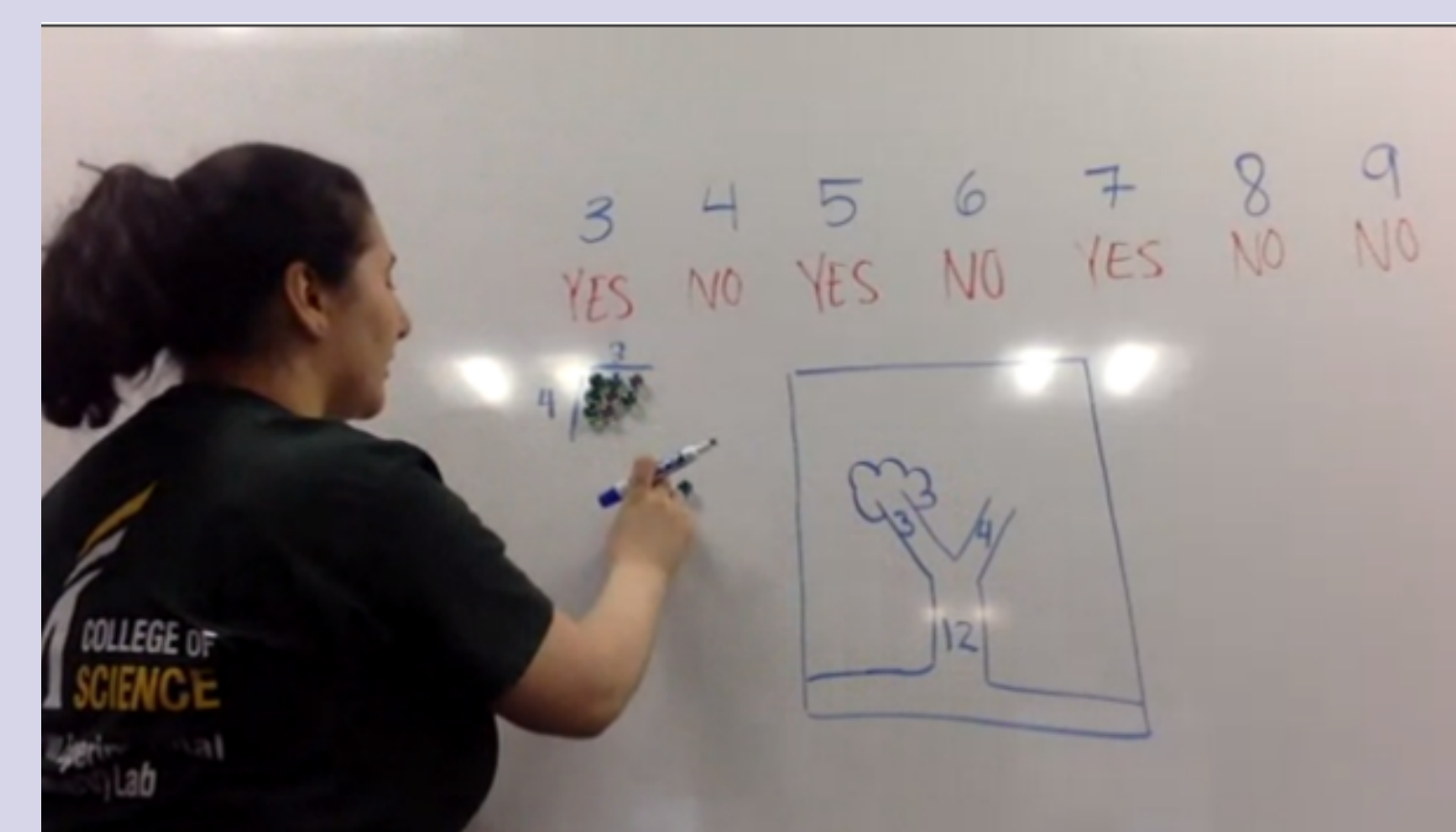
Follow-up Lesson

Really BIG Numbers lesson packet:

- Based off of Virginia Standards of learning
- Conceptualize growth
- Introduce combinatorics
- Prompt students to problem-solve



Virtual Activity Pictures



Future Goals

- Reach more students and target more secondary school students
- Expand our list of activities
- Create more follow-up lessons
- Find ways to make the booking process more efficient

Potential New Activity Themes

- Mathematical Puzzles
- Topology Magic
- Counter Examples in Mathematics
- Irrational Logic

More Pictures

