

# MEGL Outreach

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Outreach Coordinator: Jack Love

George Mason University

# What is MEGL Outreach?

*"We bring the beauty  
and wonder of mathematics  
to people outside of the academy."*

**Your Teachers Are Lying to You!**

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*Truth depends on context.  
Math is subversive.*

**You Can Count on Monsters!**



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Make smaller and smaller rectangles, and plant a tree.

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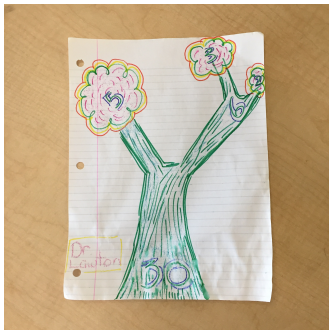
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# Our Activities

## You Can Count on Monsters!

- *How do I find the prime factorization of a composite number?*  
Make smaller and smaller rectangles, and plant a tree.



## You Can Count on Monsters!

- *How do I represent said factorization?*

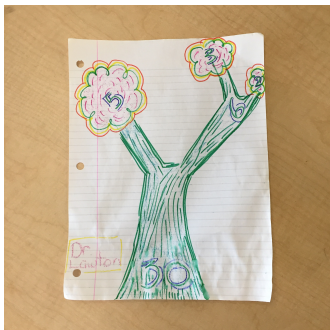
## You Can Count on Monsters!

- *How do I represent said factorization?*  
Create a monster!

# Our Activities

## You Can Count on Monsters!

- *How do I represent said factorization?*  
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## You Can Count on Monsters!

- *How do I recover a composite number from its factorization?*

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- *How do I recover a composite number from its factorization?*  
Decode the monster!



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- November 7. Centreville Regional Library.  
Monsters. Some number of participants (in  $\mathbb{Z}_{>0}$ ).

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- November 19. Fairfax Regional Library.  
Hyperbolic Crochet. 10 participants.

# Pictures!



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Big Numbers.

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Big Numbers.  
*Wait, what's that?*

# Really BIG Numbers

*By stepping through different orders of magnitude using hands-on activities, students gain an intuition for the sheer size of the real numbers.*