

Embodied Activities:
Engaging Students via Life Size Exploration

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MathFest TCPS

Encouraging Effective Teaching Innovation

August 2, 2018

- 1 Embodied Activities
- 2 Adapting Geometry Activities
 - Dilations
 - Reflections
 - Rotations
- 3 Creating From Scratch
 - Venn Diagrams
 - Cartesian Coordinate System
 - Graphing
- 4 Looking Ahead

Inspiration Strikes

- MathFest 2016
 - Dr. Hortensia Soto (University of Northern Colorado)
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- Fall 2017 Call for Micro Grants
- YES!

Materials:

- Yarn
- Feather boas
- Fuzzy balls
- Yardsticks
- String of various colors
- Large Protractors
- Bean bags
- Climb Cart
- Bungee Cords

- Cartesian Grid



Giant Cartesian Grids: Assembly Required



Ms. Jessica Hannah, the most spectacular administrative assistant

Excursions in Mathematics: Pick and Choose



Preimage



Post image

Excursions in Mathematics: Autopilot



Excursions in Mathematics: Mix it Up



Post image



Preimage

Excursions in Mathematics: Essential Materials



Careful Measurements



Mark the Spots

Excursions in Mathematics: Creating



Excursions in Mathematics: Working together



Excursions in Mathematics: Analyzing relationships



Excursions in Mathematics: Common ground



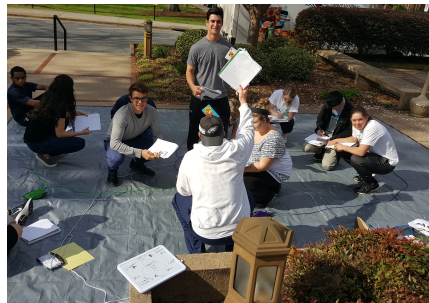
Union: Reading Journal Check



Exploring New Definitions Altogether

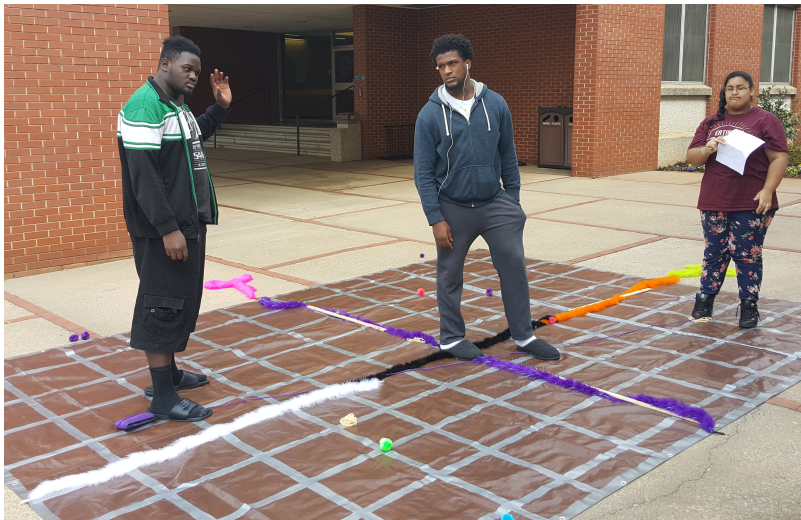


Empty Set

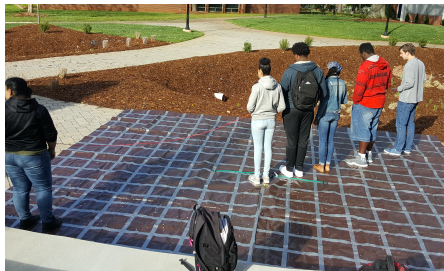


Common element

Fundamentals Check



Horizontal and Vertical Shifts



Parent Functions



Combining Transformations

Future Must Haves

- Basics review pre-assignment
- Portable board
- Clear goals for instructor and students
- Clear instructions!
 - Model
 - More suggestions/hints
- Post reflection and/or discussion

Thank you!

Any questions?