

## Keepin' It Real: Contextualizing Mathematics NCTM Annual Meeting 2015

### Contact Information:

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### Purpose of Real-World Mathematics

- Create an integrated and contextualized mathematics curriculum that reflects “real world” situations.
- Students work within an experiential learning environment.
- Students develop critical thinking skills in a practical situation.

### Cooperative Learning Groups

- The teacher’s main responsibility is to create a focused lesson with guided instruction.
- The student responsibility is to collaborate while learning and complete tasks independently.
- These processes are gradual, so that while the teacher releases the responsibility of learning to the students, the students take on more responsibility.

### Keys to Success

- Group students strategically
- Hold students accountable
- Provide timelines and structure for completion of tasks
- Rubrics are absolutely necessary! (<http://rubistar.4teachers.org/>)

### Examples of projects and their related math concepts include:

- "Invasion of the Toads" (equations and expressions)
- "Planning a Party" (number sense and proportions)
- "A Night Out with Friends" (percents and number sense)
- "Travel the World" (proportions and number sense)
- "Musical Mathematicians" (number sense)
- "Become an Author" (geometry)
- "Game Time" (probability and statistics)

### Be Creative!

- Use a “funds of knowledge” survey to explore circumstances that are culturally relevant to your students.

### Other Resources:

- *NCTM's Student Explorations in Mathematics*  
<http://www.nctm.org>
- *Radical Math: Social Justice Math*  
<http://www.radicalmath.org>
- *Real World Math*  
<http://www.realworldmath.org/lesson-downloads.html>
- *Math Academy*  
[http://www.actuarialfoundation.org/programs/youth/math\\_academy.shtml](http://www.actuarialfoundation.org/programs/youth/math_academy.shtml)