



Math Rocks!

Plano ISD
School Board Presentation
April 6, 2010

Does everything we
do empower our
students?



Program Goal



Identify and serve *mathematically high performing* students

with *rich tasks* based on classic mathematical topics

that require *thinking* far *beyond* their *grade level.*

Overview

- Second year of a pilot program
- Multi-age program
- Serves students at:
 - Andrews
 - Mathews
 - Skaggs
 - Wyatt
 - Rice MS



Program Entry Criteria

- Measures of Academic Progress (MAP) - Average of Winter & Spring Test
- Averaged MAP score > 2 standard deviations above the District mean
- 3rd Graders: > 3 standard deviations above the mean



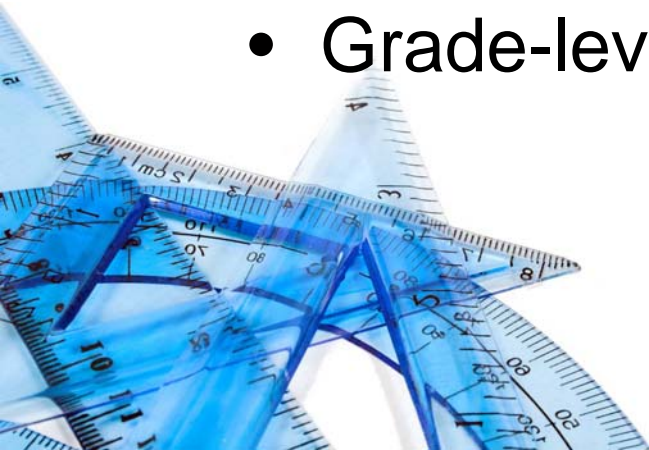
Student Identification

- Qualify to enter in grades 4, 5, or 6
- No need to re-qualify each year
- Students new to PISD are evaluated upon entry



Math Rocks Curriculum

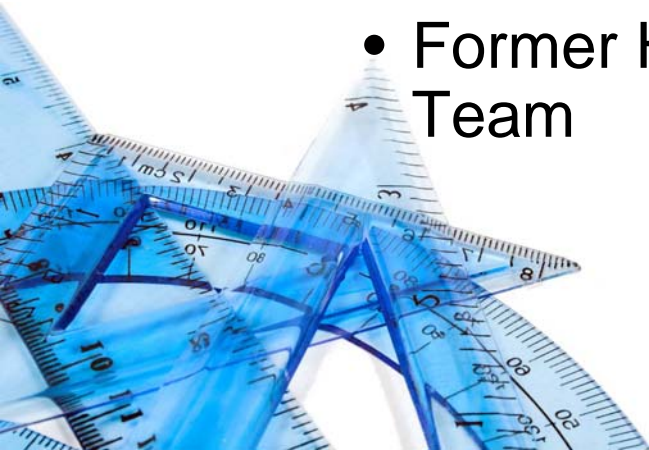
- Problem-based curriculum organized by mathematical strand
 - Simple sums
 - Consecutive numbers
 - Equilateral and equiangular figures
- American Mathematics Competition
 - AMC 8, AMC 10/12
- Grade-level TEKS where necessary



Math Rocks Curriculum

Dr. Titu Andreescu

- Associate Professor of Mathematics at The University of Texas at Dallas
- Director of the Awesome Math Program at UTD
- Former Director of the American Mathematics Competitions
- Former Head Coach of the USA Math Olympiad Team



Professional Development

- Monthly curriculum training with Dr. Andreescu
- Math Rocks Summer Institute
 - Content development
 - Lesson planning
 - Team-building



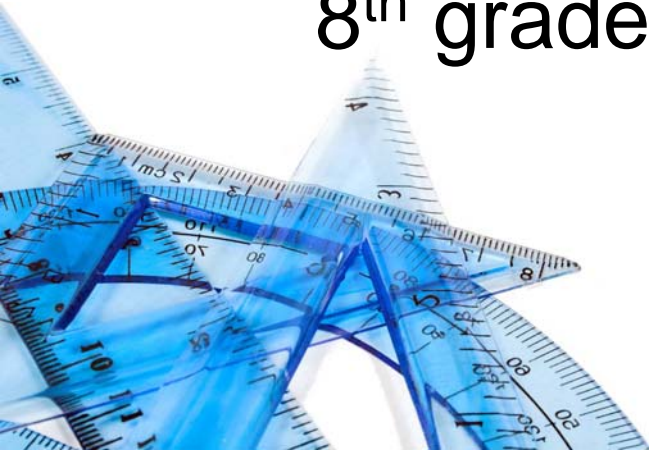
Next Steps - Elementary Math Rocks

- Cluster schools to serve all qualifying students
- Add new sites
- Transfer students to Math Rocks host schools



Next Steps - Secondary Math Rocks

- Expand Math Rocks to 7th grade at Rice
- Transfer students to Math Rocks host schools
- Develop Math Rocks curricula through 8th grade



Secondary Math Rocks

Grade	Course Content	HS Credit
Grade 6	Honors Math Rocks 6	
Grade 7	Honors Math Rocks 7 Honors Algebra I	HS Honors Algebra I
Grade 8	Honors Math Rocks 8 Honors Geometry	HS Honors Geometry

Possibilities - High School Math Rocks

- Compact Algebra II and Precalculus
- Explore partnership with UTD
- Possibility of earning credit for 6 college level mathematics courses



High School Math Rocks

Possible Course Sequence

Grade	Course Content	Credit
Grade 9	Math Rocks 9, Honors Algebra II, Honors Pre-Calculus	HS Honors Algebra II HS Honors Pre-Calculus
Grade 10	Calculus I Calculus II	College credit from UTD
Grade 11	Differential Equations Number Theory	College Credit from UTD
Grade 12	Abstract Algebra Multi-variable Calculus	College Credit from UTD

Are You Smarter Than A 5th Grader?



