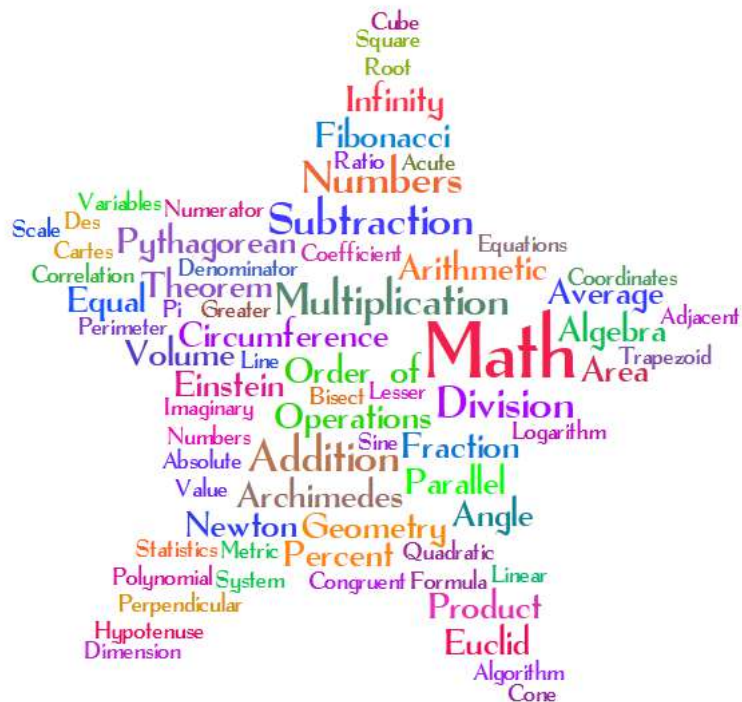


# J. R. BOLGER MIDDLE SCHOOL MATHEMATICS PRESENTATION

DECEMBER 16<sup>TH</sup>, 2013





# WHY DO WE NEED TO LEARN MATH?

**Math** is the only universal language. Anywhere you go, you can interact with people and they can understand you when you speak **Math**. Counting is essential everywhere.

As **math teachers** we teach math skills. More importantly we teach their relevance in the world outside our classroom walls. Math is not just, memorizing facts and reciting formulas. It's...

“Everything can be thought of as a math problem.”

The Math Curse by Jon Scieszka



- **Calculating time**
- **Ordering lunch**
- **Counting change**
- **Planning a budget**
- **Cooking/baking**
- **Purchasing items**
- **Playing an instrument/reading music**
- **Grades/scores**
- **Mortgages/rent**
- **Athletes: times, scores, averages, quarters/innings**
- **Video games**
- **Calendars**
- **Telling time**
- **Board games(logic)**

**Math is everywhere!**


**Many jobs and hobbies require a quick, logical decision making mind.  
Math provided the basis to creatively solve problems.**



# CORE CONTENT STATE STANDARDS MATHEMATICS

The curriculums for 5<sup>th</sup> through 8<sup>th</sup> grades have been aligned to the CCS. Our curriculums are working documents. Each is designed to ensure that our students will have the the skills & concepts needed for the NJASK/PARCC assessment. While also preparing our students for the next grade level and success in the real world.

Each grade level concentrates on developing students' problem solving skills through the use of real world problems. Students are encouraged to:

- Explain responses
  - Use logical reasoning
  - Relate operations
  - Debate/discuss solution steps & ideas
- 



# COMMON CORE STANDARDS SKILLS & CONCEPTS

Each grade level has 5 main strands.

## Fifth Grade:

- ◆ Fractions
- ◆ Number Sense
- ◆ Geometry
- ◆ Operations & Algebraic Thinking
- ◆ Measurement

## Sixth Grade:

- ◆ Ratios & Proportional Relationships
- ◆ Number System
- ◆ Geometry
- ◆ Statistics & Probability
- ◆ Expressions & Equations




# COMMON CORE STANDARDS SKILLS & CONCEPTS

## **Seventh Grade:**

- ◆ Ratios & Proportional Relationships
- ◆ Number System
- ◆ Geometry
- ◆ Statistics & Probability
- ◆ Expressions & Equations

## **Eighth Grade:**

- ◆ Number System
  - ◆ Geometry
  - ◆ Statistics & Probability
  - ◆ Expressions & Equations
  - ◆ Functions
- 



# DIFFERENTIATED INSTRUCTION & DATA

Data is continuously collected & used to better understand our students, guide our lessons, and ensure that we are meeting the needs of each child.

## Data may include:

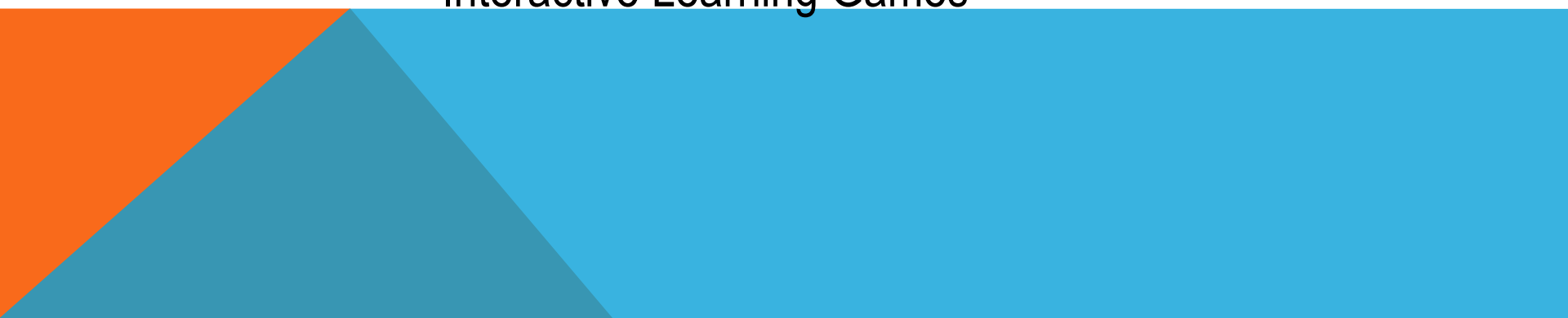
- Slate assessments
- Benchmarks
- Unit assessments
- Quizzes
- Interactive learning game scores
- Group work
- Projects
- Exit questions
- Small group work
- One on one interactions
- Leveled homework



# TECHNOLOGY IN THE MATHEMATICS CLASS


Technology is used frequently to enhance lessons, differentiate instruction, provide enrichment and/or reteaching. Technology allows teachers to foster an interactive, individualized learning plan.

## Types of technology:

- Videos
  - Projection units/Elmos
  - Macbooks/I Pads
  - Online text books
  - Teacher Web Pages/ Porta Portals
  - Interactive Learning Games
- 



# WHAT CAN YOU DO TO HELP YOUR CHILD?

- **Talk to your child...what did you work on in math class today?**
  - **Check to see if your child has homework and/or a review**
  - **Go to the Bolger homepage and on click onto a teacher's web page**
  - **Turn everyday tasks into math problems \***
  - **Highlight when you are using math**
  - **Check your child's grades on Genesis**
  - **Visit interactive websites (parents/guardians & students)**
  - **Contact your child's teacher**
- 



**QUESTIONS**

