# **Academic Resources** and **Support in Math**

Encourage getting help early. Math tends to build on concepts and skills. The sooner students can get help, the better!

Encourage your child to ask for extra help from teachers and peers when needed.

Encourage homework completion.

Speak positively about math at home. Avoid conversations about not having or having a "math brain" or about disliking math.

Understand that critical thinking and problem solving that happens during math classes can translate into any career and into every day life scenarios.

Know the standards and standardized assessments your student is responsible for knowing each year. In some situations, your student may be responsible for two different sets of standards and assessments within the same year (PSSA and Algebra Keystone).

Familiarize yourself with the Math Pathways. Contact a math teacher with any questions you may have about the pathways.

Make sure that your student is cognitively prepared for the classes they are taking. Students may be pushed too quickly for their developmental readiness. Teachers are a great resource for helping students find the right class for their readiness level.

Use the resources that come with our textbooks. In many cases, there are videos and breakdowns of each lesson.

#### **Riverview School District**

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### Strategies for Parents: Helping Your Child in Numeracy and Mathematics



This pamphlet is intended to provide parents with an overview of strategies that parents can use at home to help their students to engage in and reinforce their learning in mathematics

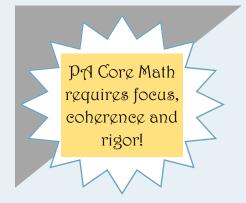
The suggested conversations, activities and experiences are intended to reinforce what your child is learning in school with regard to math. Research shows that children of all ages benefit from experiences with real world application of new learning outside of school. Any time you spend engaging your child in real world application of mathematics, or discussing problem solving strategies, can be an important investment in their learning.

"Serious Commitment to Student Success"



## What are the PA Common Core Standards?

Children across Pennsylvania will be expected to learn new strategies and stronger academic standards called the PA Core Standards. These standards are not curriculum, but rather an outline of what students should know by the end of each grade level. To measure the progress that students are making toward achieving the standards, schools assess student performance on the PSSA Test in Grades 3-8 and the Algebra I Keystone Exams. The Mathematics component of the assessments will require students to demonstrate the ability to: understand content with greater depth, build on prior knowledge across grade levels, and apply conceptual thinking, procedural skills and fluency.



The PA Common Core Standards for math emphasize conceptual understanding, not just computation, to make sure students are learning and absorbing the critical information to succeed through school and beyond.

### **Career Options with a Math Foundation**

**Actuarial Science** 

**Computer Science** 

**Operations Research** 

Teaching

**Biomathematics** 

Cryptography

**Finance** 

**Engineering** 

**Astronomy & Space Exploration** 

**Climate Study** 

Medicine

**National Security** 

**Robotics** 

**Animated Films** 

(American Math Society; Mathematics Association of America, 2015)



## How Can I Support My Child's Mastery of Mathematics at Home?

There are many ways you can assist your child with developing the critical thinking skills they will need through real life application of Mathematical Concepts. Here are some "do and discuss" approaches you can engage in with your child at home to support their learning in Math:

#### Play Math Games with Your Child:

- 24 Game
- Sudoku
- Yahtzee
- Bunco
- Phase 10
- Monopoly

### Real Life Application of Math Skills for Elementary Students:

- Play "Beat the Register" when you shop with your child
- If you go on a trip/vacation, discuss the travel expense planning (we're driving 800 miles, our car gets 25 mpg; how many tanks will we need?)

### Real Life Application of Math Concepts for Secondary Students:

- Discuss math as it relates to home mortgages, insurance, credit cards, auto financing, etc.
- Have your child help you determine the best product or service (systems of equations)

## Support Student's Ability to Think Critically Across a Range of Disciplines and Contexts

- Use everyday experiences and discussion to explore science, history, math, arts: Read nutrition labels, watch the weather channel, discuss illustrations in a book, create a budget, and read manuals
- Encourage cultural learning experiences: Visit museums, libraries, science and history centers, planetariums, attend theatre productions in order to broaden background knowledge
- Watch and discuss documentaries (for example: NOVA, PBS, American Experience) on television and discuss (Consider perspective, conflict, and various movements in history)