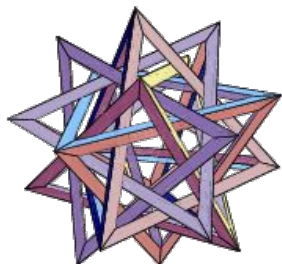


# Middle School Mathematics Parent Information



## How can I help make math a positive experience for my child?

- **Praise effort and hard work rather than “smartness” or speed.**

While some children have an easier time in mathematics in others, ALL children have the capacity to learn high levels of mathematics. By praising students’ thinking and perseverance rather than how quickly they can solve a problem, you open up the time, space, and opportunity for students to investigate, make mistakes, and construct understanding.

- **Encourage students with probing questions, even when their thinking is incorrect.**

For example, if a child arrives at an answer that is unreasonable, ask the child to evaluate whether the answer makes sense, have them communicate their thought process to you, or have them draw a picture to represent the problem.

- **Encourage students to notice and wonder about the world around them.**

Questions such as “What do you notice?,” “What do you wonder?,” and “I’m not sure, what do you think?,” encourage children to notice patterns, generalize, and make observations about problems they encounter and the world around them. These are great conversation starters at the dinner table, driving in the car, or while doing everyday tasks around the house/outside.

- **Do not share with your child that you were not good at math or that you dislike math.**

Research shows that this message can be damaging to children, and affects their mindset and approach to math problems and math class.

See also “A Math Major Talks About Fear” and [youcubed.org](http://youcubed.org).

## General Principles of Middle School Grading:

- Grades should represent student mastery of essential standards in a subject.
- Non-academic factors such as participation, effort, and attitude should be reported separately from academic grades.
- Student work should be measured based on predetermined levels of quality (proficiency scales) rather than subjective or changing criteria.
- Grades should provide meaningful feedback to help drive improvement.
- Students learn material at different rates, so they should have the ability to relearn and re-assess in order to show improvement.

## Free Online Math Resources

- ❑ Figure This! Math Challenges for Families  
[figurethis.org](http://figurethis.org)
- ❑ Refraction  
[play.centerforgamescience.org/refraction/](http://play.centerforgamescience.org/refraction/)
- ❑ Greg Tang Math Games  
[gregtangmath.com/games](http://gregtangmath.com/games)
  - ❑ NumTanga
  - ❑ Kakooma
  - ❑ Espresso
  - ❑ Satisfaction
  - ❑ ...and many more!
- ❑ KenKen Puzzles  
[www.kenkenpuzzle.com/](http://www.kenkenpuzzle.com/)
- ❑ Ask Dr. Math  
[mathforum.org/dr.math/](http://mathforum.org/dr.math/)
- ❑ Math in Focus  
[my.hrw.com](http://my.hrw.com)
  - ❑ 6th grade  
**User name:** indepmath6 | **Password:** Truman
  - ❑ 7th grade  
**User name:** indepmath7 | **Password:** Pujols
  - ❑ 8th grade  
**User name:** indepmath8 | **Password:** Rogers