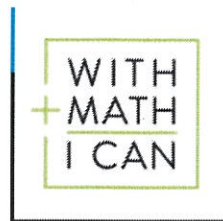




A Classical Education for the Modern World



Help your Child Succeed in Math: Tips for Parents of Students in Middle School

When parents are involved in their children's education, they will do better in school. Here are some tips for parents on how you can help your child succeed in math.

Be Positive About Math

- ☉ Express confidence in your child's ability to succeed in math.
- ☉ Help your child see errors as opportunities for learning.
- ☉ Share positive math memories from your past. It does not help to share negative experiences.

Make Attendance a Priority

- ☉ Schedule appointments and vacations outside of school time.
- ☉ In case of an absence, ensure your child has a reliable "study buddy" to collect handouts and relay assignment information.
 - Check the wiki pages and encourage your child to make direct contact with the teacher upon return.

Encourage Organization

- ☉ Ensure appropriate equipment is easily accessible—for example: sharp pencils, erasers, ruler, protractor, compass, calculator, hole punch.
- ☉ Encourage your child to organize paper in binders and backpacks on a regular basis.
 - Loose sheets should be titled and dated, and organized chronologically in divided sections of a binder.
- ☉ Help your child to keep organized.
 - Have a routine for checking the wiki pages.
 - Encourage the use of a planner to record school assignments, homework and tests.

- ☉ Help your child set realistic short-term and long-term goals for improvement in math.
- ☉ Make sure your child keeps a healthy balance between schoolwork and other activities such as sports, clubs and friends.
- ☉ Help your child set priorities for extracurricular activities to make sure there is enough time for homework.

Connect mathematics to Daily Life

- ☉ Ask your child to estimate grocery bills, change, tax, tips, measurements, travel distances and times, and the quantity of paint or carpet needed for a room.
- ☉ Talk about the ways in which you use mathematics in your job and daily life, and about mathematics in newspapers (sports statistics, stock prices, math puzzles, graphs).
- ☉ Seize every opportunity to calculate mentally and talk about the process involved.

Stay Informed

- ☉ Ask about math in school—what topics are being discussed? What's for homework? What's interesting?
- ☉ Read the curriculum documents for your child's grade, available at <http://www.corestandards.org/Math/>.

Have Fun with Math

- ☉ Play family games to add excitement to repetitive practice. You can play:
 - Card games—e.g. Cribbage, Set, Visual Brainstorms
 - Board games—e.g. Chess, Backgammon, Mastermind
 - Puzzles like sudoku
 - Computer games—e.g. Tetris, Cubis, Earthquake
 - Other – “Who Wants to Be a Mathionaire”

Be Supportive During Homework

- ☉ Encourage your child to have a regular time of day to do homework-before s/he is too tired.
- ☉ Ask your child what math homework s/he has each day. Compare what is in the planner with what is on the wiki.
- ☉ Encourage your child to write down a solution to each question – even if s/he's not sure it is correct.
- ☉ Check to see that all questions, and all parts to the questions are complete.
- ☉ If no homework is assigned, review and reorganize previous work.
- ☉ Be resourceful when stuck:
 1. Reread the problem out loud – check the meaning of math terms.
 2. Highlight important information in the problem.
 3. Look for examples of similar solutions in texts and notes.
 4. Break the problem into parts.
 5. Discuss alternative approaches.
 6. Take a break and try again later.
 7. Phone/text a friend.
 8. Look for information related to the topic online. (Khan Academy is a great resource for this: www.khanacademy.org)

Help your Child Develop an Assignment Action Plan

- ☉ Begin immediately and have a time plan.
- ☉ If any portion of the assignment seems confusing, clarify with the teacher immediately.
- ☉ "Chunk" lengthy assignments into parts.
- ☉ Follow instructions: if it is to be submitted in pencil, ensure this is done.
- ☉ Proofread math – suggest your child ask him/herself the following:

- Have I made proper and effective use of mathematical terminology?
- Have I used mathematical tools to ensure precision?
- Have I included correct units where required?
- Have I answered the question that was asked? Would someone else understand my solution process as it is written?
- Have I completed all parts of the assignment?
- Does my solution make sense?

Support Active Study Techniques

- ☉ Clarify exact content of a test as soon as a date is assigned, and clear up uncertainties.
- ☉ Spread studying over several days.
- ☉ Write, talk, sing—use variety to consolidate and retain information.
 - ☉ Make study notes so that the material to be learned is in a condensed version. (Flash cards can be helpful:
<https://www.canva.com/create/flashcards/>)
- ☉ Rework questions from homework or assignments that caused difficulty in the past and check solutions.

Develop a Math Practice Routine

- ☉ Set aside time to practice common core aligned practice problems at least once a week.
- ☉ Spend at least 60 minutes per week on a math practice website – each practice session should be at least 15 minutes.
- ☉ Encourage your child to talk and write about math: how s/he approaches a problem, steps to finding a solution, etc.

Resources

- ☉ www.free-test-online.com/ccss/ccss.html
- ☉ www.mathgames.com/standards/
- ☉ www.ixl.com/math/
- ☉ www.mathchimp.com/
- ☉ www.xpmath.com/
- ☉ www.aplusclick.org/
- ☉ www.buzzmath.com/
- ☉ www.funmaths.com/cool_math_games/index.htm (for older students)
- ☉ *Becoming a Problem Solving Genius: A Handbook of Math Strategies* by Edward Zaccaro
- ☉ *The Art of Problem Solving, Volume 1* by Sandor Lehoczky (for advanced students)