

# MATH APPS AND WEBSITES ALIGNED TO COMMON CORE STANDARDS



IXL has a whopping 2,000 math-practice modules that meet nearly all the Common Core math standards. You'll find Pre-K games covering the fundamentals through high school lessons and learning activities on geometry, how to graph equations, or the Pythagorean theorem, for example. (Gr. PreK-10, Free)



BrainPop Featured Movie's extensive collection, is where students can get a fun, free daily dose of information. Tim and Moby the robot, in a series of animated videos, break down tons of topics from atoms to the idea of ... a main idea! (Gr. 2-8, Free)



Mathalicious teaches math via trendy, open-ended, real-world scenarios, in an effort to improve middle school kids' attitudes about the subject. Companion materials like student worksheets, a teaching guide, and a multimedia slideshow guide each lesson. (Gr. 6-12, \$10-\$30 per month)



Slice It! Delivers 200 brain-teasing puzzles that challenge kids' understanding of core geometry concepts including shapes, symmetry, area, and measurement. Each puzzle presents a different shape, which kids must "slice" into a set number of equal parts. (Gr. 3-7, Free)



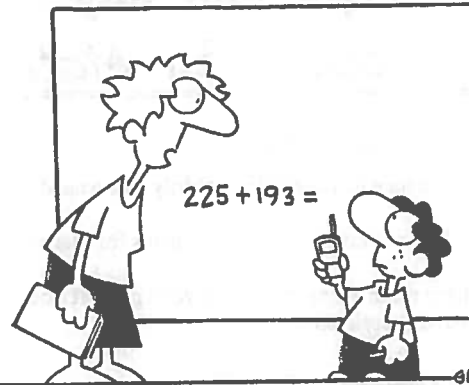
where math is just a game

Mangahigh.com is a Flash-based website that boasts a dozen math games and hundreds of tutorials and quizzes, aligned with Common Core. It provides a good way of acquainting kids with a wide variety of math fundamentals, from addition and subtraction to beginning algebra concepts. (Gr. 2-12, Free)



DreamBox Learning Math is an interactive, adaptive, self-paced program that provides engaging activities for students to learn and practice skills and concepts in mathematics. This comprehensive mathematics program covers a wide range of subjects and skills at each grade level. One of the strengths of the program is that players can progress through the skills and activities of any grade level, regardless of their actual grade level. (Gr. K-6, \$12.95 per month)

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"You have to solve this problem by yourself. You can't call tech support."

## HOW CAN YOU SUPPORT YOUR CHILD IN Math ?

- Ensure the student takes responsibility for his or her own learning by finding assistance independently; this is essential for student success in all areas of academics.
- Never give children the answers to problems! By giving away answers, you're depriving your child of the chance to develop the mental processes required to learn a new concept. No parent enjoys seeing their child struggle, but providing answers could set them up for frustration when they have to tackle more difficult problems and might even stunt their progress as classmates move to more advanced lessons. Furthermore, your child's teacher will not be able to address the misconceptions or areas of weakness that should be targeted in school if homework assignments do not reflect the student's level of understanding.
- Realize that your child may struggle with abstract concepts if his or her brain is not quite ready to reason at an abstract level. Your child's brain will mature in time, and success in math class is likely to accompany this development.
- If your child is frustrated by math, show him or her how to focus on concepts rather than procedures. This might help some students approach and solve problems in a different way—one that makes more sense to them. For instance, ask your child to explain one problem in their homework each night. If your child is simply reciting step-by-step instructions, encourage him or her to elaborate by asking questions focusing on the "why" of the problem.
- Visit the following web resources:
  - Engrade for grades, homework, and class notes
  - YouTube for Math "how-to" videos
  - Smarterbalanced.org for new Common Core test
  - Gomathacademy.com/pilot (Access code: CpjLqCqF) for practice problems

# Tips and Ways You Can Help Your Children Succeed in *Math* Both at Home and at School

## *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.

Encourage your child to contact the teacher upon return.

## *Encourage Organization*

Ensure appropriate equipment is easily accessible, for example: lined paper, sharp pencils, erasers, ruler, protractor, compass, calculator, hole puncher, and coloring materials.

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. Encourage the use of a journal or planner to record school assignments, homework, and tests.

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 that there is enough time for homework.

## *Connect Mathematics to Daily Life*

Ask your child to estimate grocery bills, change, tax, tips, measurements, traveling 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, like doubling a recipe, and about math in the newspaper (sports statistics, stock prices, math puzzles, graphs).

Seize every opportunity to calculate mentally and talk about the process involved.

## *Support Active Study Techniques*

Clarify exact content of a test as soon as a date is assigned, and clear up uncertainties.

Spread studying out 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.

## *Ensure the Basic Facts are Mastered*

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, Mancala), and computer games (e.g. Tetris, Cubis)

## *Be Supportive During Homework*

Encourage your child to have a regular time of day to do homework - before he or she is too tired.

Ask your child what math homework he or she has each day. Many schools have homework assignments posted on the school website or on a voice mail line, so you can find out what homework is assigned for your child's class.

Encourage your child to write down a solution to each question - even if he or she is not sure it is correct.

Check to see that all questions, and all parts are complete.

Ensure corrections are made, and suggest they be made in pen.

If no homework is assigned, review previous work.

Be resourceful when stuck:

1. Reread the problem out loud - check 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 a friend.
8. Look for information related to the topic on the Internet.

## *Help Your Child Develop a HW 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 homework is to be submitted in pencil, ensure that this is done.

Proofread math and suggest that your child ask himself/herself:

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

## *Stay Informed*

Ask about math in school - what topics are being discussed? What's for homework? What's interesting?