A Sample of What Your Child Will Be Working on in 8th Grade

- Understanding slope, and relating linear equations in two variables to lines in the coordinate plane
- Solving linear equations (e.g., \(-x + 5(x + \frac{1}{3}) = 2x - 8\); solving pairs of linear equations (e.g., \(x + 6y = -1\) and \(2x - 2y = 12\)); and writing equations to solve related word problems
- Understanding functions as rules that assign a unique output number to each input number; using linear functions to model relationships
- Analyzing statistical relationships by using a best-fit line (a straight line that models an association between two quantities)
- Working with positive and negative exponents, square root and cube root symbols, and scientific notation (e.g., evaluating \(\sqrt{36} + 64\); estimating world population as \(7 \times 10^9\))
- Understanding congruence and similarity using physical models, transparencies, or geometry software (e.g., given two congruent figures, show how to obtain one from the other by a sequence of rotations, translations, and/or reflections)

Help Your Child Learn at Home

Try to create a quiet place for your child to study, and carve out time every day when your child can concentrate. You should also try to sit down with your child at least once a week for 15 to 30 minutes while he or she works on homework. This will keep you informed about what your child is working on, and it will help you be the first to know if your child needs help with specific topics. Additionally, here are some activities you can do with your child to support learning at home:

**English Language Arts & Literacy**
- Make time in everyone’s busy schedule for family discussions about things going on around the world. Weekends can be a chance for everyone to catch up
- Visit the campus of a local college with your teen. Begin talking about college early. What does he or she expect from college? What high school courses will your child need to pass to prepare for college?

**Mathematics**
- Ask your child to share with you any work he or she is doing in math class that strikes him or her as interesting. Some possibilities might include:
  - Solving interesting problems involving cylinders and spheres, such as figuring out how much water fits inside a garden hose, or how many earths would fit inside the sun
  - Analyzing data with a scatterplot, for example to decide whether exercise and obesity are related

For more information, the full standards are available at [www.corestandards.org](http://www.corestandards.org)