

Family Guide for Student SUCCESS

Grade 6 MATH



FAMILIES + SCHOOLS = STUDENT SUCCESS

Parents and family are a child's first teachers in life and have valuable insights into the needs, strengths, and interests of their child. The collaboration of caregivers and educators is vital in educating the whole child. You can encourage your child's academic growth by reinforcing classroom activities at home. The Family Guide for Student Success outlines the critical content that all students should know and be able to do at the end of 6th grade. The achievement of the expectations will help your child meet the assessment standards established by our state. It is only through your support and active participation in your child's education that we form a partnership for success for all the children in Alabama.

WHY ARE STANDARDS IMPORTANT?

- They help ensure that all students, no matter where they live, are prepared for success in college and the workforce.
- Standards provide a clear roadmap of learning for teachers, parents, and students.
- Having clearly defined goals helps families and teachers work together to ensure that students succeed.
- They also will help your child develop critical thinking skills that will prepare him or her for college and career.

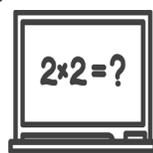
GRADE 6 CONTENT PRIORITIES

This guide provides an overview of what your child will learn by the end of 6th grade in mathematics. If your child is meeting the expectations outlined in these standards, he or she will be well prepared for 8th grade. In Grade 6, instructional time should focus on four essential areas, all of which have equal importance:



PROPORTIONAL RELATIONSHIPS

Your child can build on multiplication concepts to solve ratio and unit rate problems.



RATIONAL NUMBERS and Fraction Division

Your child can build on division concepts to divide fractions. Your child can explain negative numbers and their opposites in context.



STATISTICS

Your child can analyze data to determine trends, outliers, and best measure of central tendency.



ALGEBRA & 2D & 3D SHAPES

Your child can analyze 2D & 3D shapes to generalize equations and formulas for area, surface area, and volume.

MATH @ HOME

Have you ever heard this phrase from your child before about math, "When will I ever use this?" The more they can make a connection between math & the real world, the more they will value it. Below you will find a few ideas to showcase how your child can relate the 6th grade math concepts he/she is learning at school and apply them at home in everyday situations.

Proportional Relationships

- Make a table with your child to show the speed of a car in miles per hour.
- If a 6 pack of canned drinks cost \$3.00, how much does one can cost? Have your child write an equation to represent the total cost.
- While at a store, have your child find the sales tax for a purchase. You can have them find how much of a tip for a waiter while at a restaurant or how to make an income working on commission, like a real estate agent. All of these are based on percents.

Rational Numbers and Dividing Fractions

- On a number line with positive and negative numbers, have your child locate rational numbers and their opposites on the number line.
- If you have 2.5 lbs of hamburger meat and your burgers are 1/4 lb each, how many burgers will you be able to make?
- Watch Jeopardy! together. Have your child notice what happens when a player gets a right answer vs. a wrong answer. Which answers correspond to positive points and which ones correspond to negative points?

Statistics

- Have your child conduct a survey/poll on social media for their favorite food. Represent the results in a box and whisker plot and discuss what the representation tells you about the data.
- Determine the mean, median, and mode of your math grades for each 9 weeks at school and represent it graphically.

Algebra

- Create a "Memory" game with flash cards. Create equivalent expressions and allow your child to find the matches.

2D & 3D Shapes

- Measure a cereal box to find its volume. Then, have your child cut the edges of the box and flatten it to find the surface area of its net.

WHAT IS AMSTI?

The Alabama Math, Science, and Technology Initiative, commonly referred to as AMSTI, is the Alabama Department of Education's initiative to improve STEM teaching & learning statewide. Its mission is to support Alabama educators and students in learning STEM by doing STEM. Check us out by scanning the QR Code.



“You are your child’s greatest champion. Ask about your child’s math progress frequently!”

HOMEWORK HELP



AMSTI

Quick links for Family Resources to do math at home.

www.amsti.org/68-math-student-family



Khan Academy

Instructional Math Videos with Interactive Guided Practice

www.khanacademy.com



Math Help!

Instructional Math Videos with Interactive Guided Practice & Self Assessment

www.mathhelp.com



DESMOS

Free Graphing or Scientific Calculator

www.desmos.com



Geogebra

Free Graphing, Scientific, 3D, & CAS Calculator

www.geogebra.org