

# Family Guide for Student SUCCESS

## 3rd Grade 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 guiding each child toward success. The Family Guide for Student Success outlines what your child should learn in 3rd grade. 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 3rd 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.

## 3RD GRADE CONTENT PRIORITIES

This guide provides an overview of what your child will learn by the end of 3rd grade in mathematics. If your child is meeting the expectations outlined in these standards, he or she will be well prepared for 4th grade. In Grade 3, instructional time should focus on four essential areas, all of which have equal importance:



#### MULTIPLICATION & DIVISION

Your child can develop an understanding of what it means to multiply & divide whole numbers.



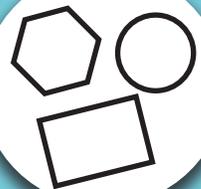
#### FRACTIONS

Your child can build on their understanding of breaking shapes into parts to begin formalizing their knowledge of fractions.



#### AREA

Your child can measure area by finding the total numbers of square tiles it takes to cover a rectangular shape.



#### SHAPES

Your child can describe and analyze two-dimensional shapes and classify them by common traits.

# 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 3rd grade math concepts he/she is learning at school and apply them at home in everyday situations.

## Multiplication & Division

- Lots of items you buy are arranged in rectangular arrays (rows & columns), like eggs, canned drinks, tiles on a floor, or window panes.
- Ask your child, "If we buy 3 cartons of eggs, how many eggs will we have?" or "We need 24 canned cokes, how many 6 packs of coke do we need to buy?"
- When cooking, tell your child, "I need 10 cups of water in the pot and this measuring cup holds 2 cups. How many times will you need to fill the measuring cup with water and put in the pot?"

## Fractions

- When making peanut butter & jelly sandwiches, ask your child to cut it into halves and then into fourths. Ask them what happens to the size of the pieces as they are dividing them into a greater number of pieces.
- When you are eating pizza, decide how to cut the pizza into equal parts for your family. What is the fractional part of each piece? Is your share of the pizza fair?

## Area

- Ask your child, "How many Cheez-Itz would it take to cover the front of the box? How many Cheez-Itz tall is the box? How many Cheez-Itz wide is the box? How do you think we could figure out how many Cheez-Itz it would take to cover the front of the box without having to actually do it?"
- If you have square tiles at home, ask your child to figure out how many square feet is in the tiled area. Ask them what could be a good strategy to determine how many square feet are inside a space.

## Shapes

- You can help your child by looking for shapes that are common in everyday life, from triangles in Doritos to squares & rectangles in picture frames. Always be on the look out for shapes around you and ask your child to tell you what shape it is. Then ask the most important question, "How do you know?"

## 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.



“ Never associate math with speed. Forcing kids to work fast is the best way to create math anxiety in children. ”

## HOMEWORK HELP



### AMSTI

Quick links for Family Resources to do math at home

[www.amsti.org/35-math-student-family](http://www.amsti.org/35-math-student-family)



### Khan Academy

Instructional Math Videos with Interactive Guided Practice

[www.khanacademy.com](http://www.khanacademy.com)



### Math Help!

Instructional Math Videos with Interactive Guided Practice & Self Assessment

[www.mathhelp.com](http://www.mathhelp.com)



### WolframAlpha

A unique engine for computing answers & providing mathematical knowledge

[www.wolframalpha.com](http://www.wolframalpha.com)



### PBS Learning Media

Direct access to videos and interactive mathematics

[www.pbslearningmedia.org/subjects/mathematics](http://www.pbslearningmedia.org/subjects/mathematics)