

# THE FLORIDA BENCHMARKS FOR EXCELLENT STUDENT THINKING (B.E.S.T.) STANDARDS

Parent Guide for Fourth Grade Mathematics

The B.E.S.T. Standards for Mathematics are mathematics standards for Florida students that are a high-quality foundation to which our assessments and instructional materials will be aligned. The B.E.S.T Standards were created by Florida educational leaders and Mathematics teachers reflecting the feedback of parents, stakeholders and classroom teachers. The benchmarks for the standards are mastery goals that students are expected to attain by the end of the school year.

### Florida B.E.S.T. Strands: Third Grade

Number Sense and Operations
Fractions
Algebraic Reasoning
Measurement
Geometric Reasoning
Data Analysis and Probability

## Instructional time will focus on:

- ✓ Extending the understanding of multi-digit multiplication and division
- ✓ Developing the relationship between fractions and decimals
- ✓ Classifying and measuring angles
- ✓ Developing an understanding for interpreting data to include mode, median, and range

### Fourth Grade Standards at a Glance

- Place value of multi-digit numbers
- Compare numbers up to 1,000,000
- Operations with multi-digit numbers including decimals
- Understand the relationship between fractions and decimals
- Add, subtract and multiply fractions
- Solve problems with a whole number and fractions using the four operations
- Numerical patterns following a rule
- Solve problems involving: length, mass, weight, temperature, and volume
- Draw, classify, and measure angles
- Perimeter and area of rectangles
- Collect and interpret data
- Find mode, median, and range of a data set
- Solve two-step real world problems involving money and time

# Mathematical Thinking and Reasoning (MTR) Standards

Florida students are expected to engage with math through the MTR Standards daily to promote deeper learning and understanding.

- 1. Actively participate
- 2. Represent problems in multiple ways
- 3. Complete tasks with fluency
- 4. Engage in discussions
- 5. Use patterns to connect concepts
- 6. Assess reasonableness of solutions
- 7. Apply math to the real world



### **Mathematical Activities to Support Learning at Home**

- ✓ Board Games: Games can develop more complex ways of reasoning. Great options are Checkers, Clue, Dominos, Chess and Mancala.
- ✓ Word Problem Creator: Create and solve two step word problems based on real life situations. (For example: Johnny drove 238 miles to an amusement park. Sarah drove 52 miles more than Johnny. Andrea drove 87 miles less than Sarah. How many miles did Andrea drive to the amusement park?)
- ✓ **Measure your Home:** Determine the area and perimeter of windows in the home. Illustrate and label findings to determine if any windows have the same perimeter and different areas or the same area and different perimeters.
- ✓ **Place Value Dice:** Roll 3 dice, create a 3-digit number and write it down. Repeat these steps. Add, subtract, multiply or divide the two number you made!
- ✓ Tape Angles: use masking tape to create intersecting lines on a wall or create a smaller version on a piece of paper. Then measure and compare the various angles that you have created!

#### **Fourth Grade Mathematics Picture Books**

Spaghetti and Meatballs for All by Marilyn Burns (Multiplication)

How Much, How Many, How Far, How Heavy, How Long, How Tall Is 1,000? by Nolan, Helen (Measurement)

Sam's Sneaker Squares by Nay Gabriel (Area)

A Remainder of One by Elinor Pinczes (Division)

**Full House** by Dayle Dodds (Fractions)

Sir Cumference and the Great Knight of Angleland by Cindy Neuschwander (Angles)

**The Math Curse** by Jon Scieszka (Problem Solving)

### **Academic Mathematics Vocabulary**

**Automaticity**: the ability to act according to an automatic response or pattern which is easily retrieved from long term memory

**Exploration**: instruction focuses on helping the student develop understanding through the use of manipulatives, visual models, discussions, estimation, and drawings

**Procedural Fluency**: instruction focuses on helping the student become fluent, efficient and accurate with a procedure

Procedural Reliability: instruction focuses on helping the student choose a method they can use reliably

