



Congratulations!

By completing *Third Grade Everyday Mathematics*, your child has accomplished a great deal. Thank you for all of your support!

This Family Letter is here for you to use as a resource throughout your child's summer vacation. It includes an extended list of Do-Anytime Activities, directions for games that can be played at home, a list of mathematics-related books to check out over vacation, and a sneak preview of what your child will be learning in *Fourth Grade Everyday Mathematics*. Enjoy your vacation!



Do-Anytime Activities

Mathematics means more when it is rooted in real-life situations. To help your child review many of the concepts he or she has learned in third grade, we suggest the following activities for you and your child to do together over vacation. These activities will help your child build on the skills he or she has learned this year and help prepare him or her for *Fourth Grade Everyday Mathematics*.

1. If you receive a daily newspaper, continue with the length-of-day project by recording the time of sunrise and sunset once a week. Draw conclusions about the length of a day during vacation months.
2. Over a period of time, have your child record the daily temperatures in the morning and in the evening. Keep track of the findings in chart or graph form. Ask questions about the data—for example, to find the differences in temperatures from morning to evening or from one day to the next.
3. As you are driving in the car or going on walks, search for geometric figures and identify them by name along with some of their characteristics. For example: A stop sign is an octagon, which has eight sides and eight angles; an orange construction cone is a cone, which has one flat surface that is shaped like a circle, a curved surface, and an apex; a brick is a rectangular prism in which all faces are rectangles.
4. Continue to practice addition, subtraction, multiplication, and division facts. Using short drill sessions with Fact Triangles, fact families, and games helps your child build on previous knowledge.
5. Provide multidigit addition and subtraction problems for your child to solve; encourage your child to write number stories to go along with the number models.

Building Skills through Games

The following section lists rules for games that can be played at home. The number cards used in some games can be made from 3" by 5" index cards.

Division Arrays

- Materials**
- number cards 6–18 (3 of each)
 - 18 counters, such as pennies
 - 1 regular die
 - scratch paper for each player



Players 2 to 4

Directions

Shuffle the cards and place the deck facedown on the playing surface.

At each turn, a player draws a card and takes the number of counters shown on the card. Next, the player rolls the die. The number on the die specifies the number of equal rows the player must have in the array he or she makes using the counters.

The player's score is the number of counters in each row. If there are no leftover counters, the player's score is double the number of counters in each row.

Players take turns. They keep track of their scores on scratch paper. The player with the highest total at the end of five rounds wins.

Three Addends

- Materials**
- paper and pencil (for each player)
 - number cards 1–20 (1 of each)

Players 2

Directions

Shuffle the cards and place the deck facedown on the playing surface.

In turn, players draw three cards from the top of the deck. Both players write addition models using the three numbers on their sheets of paper. (The numbers can be written in whatever order they find easiest for solving the problem.) Players solve the problem and then compare answers.

Option: For a harder version, players take turns drawing four cards from the top of the deck. Players thus solve problems with four addends.

Baseball Multiplication

- Materials**
- 2 regular dice
 - 4 pennies
 - score sheet (see below)
 - calculator



Players 2

Directions

Draw a diamond and label *home plate*, *first base*, *second base*, and *third base*. Make a score sheet that looks like the one below.

SCORE SHEET

Innings	1	2	3	4	5	6	Total
Player 1 outs							
Runs							
Player 2 outs							
Runs							

1. Take turns being the pitcher and the batter.
2. At the start of the inning, the batter puts a penny on home plate.
3. The pitcher rolls the dice. The batter multiplies the two numbers that come up and tells the answer. The pitcher checks the answer with a calculator.
4. If it is correct, the batter looks up the product in the Hitting Table. The batter either makes an out or moves a penny along the diamond for a single, double, triple, or home run.
An incorrect solution is a strike, and another pitch (dice roll) is thrown. Three strikes make an out.
5. A run is scored each time a penny crosses home plate.
6. A player remains the batter for 3 outs. Then players switch roles. The inning is over when both players have made 3 outs.
7. After making the third out, a batter records the number of runs scored in that inning on the score sheet.
8. The player who has more runs at the end of six innings wins the game.

HITTING TABLE

- 36 = Home Run
- 26–35 = Triple
- 16–25 = Double
- 6–15 = Single
- 5 or less = Out

Vacation Reading with a Mathematical Twist

Books can contribute to children's learning by presenting mathematics in a combination of real-world and imaginary contexts. The titles listed below were recommended by teachers who use *Everyday Mathematics* in their classrooms. They are organized by mathematical topic. Visit your local library and check out these mathematics-related books with your child.

Geometry

A Cloak for the Dreamer by Aileen Friedman

Fractals, Googols, and Other Mathematical Tales by Theoni Pappas

Sir Cumference and the First Round Table: A Math Adventure by Wayne Geehan

Measurement

How Tall, How short, How Far Away by David Adler

Math Curse by Jon Scieszka

The Story of Money by Betsy Maestro

If You Made a Million by David Schwartz

Measuring on Penny by Loren Leedy

Numeration

Fraction Fun by David Adler

How Much Is a Million? by David Schwartz

Operations

The Grapes of Math by Gregory Tang

The King's Chessboard by David Birch

The I Hate Mathematics! Book by Marilyn Burns

A Remainder of One by Elinor J. Pinczes

Anno's Mysterious Multiplying Jar by Masqichiro Anno

Patterns, Functions, and Algebra

Eight Hands Round: A Patchwork Alphabet by Ann Whitford Paul

A Million Fish... More or Less by Patricia C. McKissack

Reference Frames

Pigs in a Blanket by Amy Axelrod

Three Days on a River in a Red Canoe by Vera B. Williams

Looking Ahead: Fourth Grade *Everyday Mathematics*

Next year, your child will ...

- ◆ go on a World Tour.
- ◆ continue to practice addition and subtraction skills.
- ◆ develop multiplication and division skills.
- ◆ investigate methods for solving problems using mathematics in everyday situations.
- ◆ work with number lines, coordinates, times, latitude and longitude, and dates.
- ◆ collect, organize, and interpret numerical data.
- ◆ continue to explore 3-dimensional objects and their properties, uses, and relationships.
- ◆ read, write, and use whole numbers, fractions, decimals, percents, and negative numbers.
- ◆ explore scientific notation.

Again, thank you for all of your support this year. Have fun continuing your child's mathematics experiences throughout the vacation!

