



## 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 maintain and 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.

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### Roll to 100

- Materials**
- paper and pencil (for each player)
  - 2 six-sided dice

**Players** 2 to 4

### Directions

Players take turns. At the first turn, a player rolls the dice any number of times and mentally adds all of the numbers rolled. The player may stop rolling the dice at any time. The final sum is entered as the score for Turn 1. If a 1 is rolled at any time, the turn is over and 0 is entered as the score for this turn.

On subsequent turns, a player rolls the dice any number of times and mentally adds the results to the score from the previous turn. The final sum is the score for the turn. If a 1 is rolled at any time, this turn is over and the score remains the same as the score at the end of the previous turn. The first player to score 100 or more wins the game.

**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.

<b>HITTING TABLE</b>	
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 below were recommended by teachers who use *Everyday Mathematics*. 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

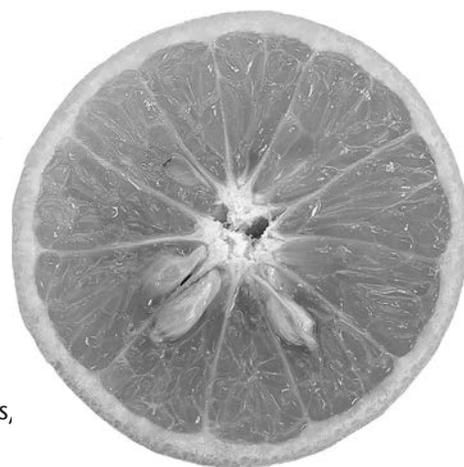
*Pigs in a Blanket* by Amy Axelrod

*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.
- ◆ develop automaticity with addition and subtraction fact extensions.
- ◆ continue to maintain automaticity with multiplication facts and to develop proficiency with related division facts.
- ◆ use basic facts to compute fact extensions such as  $30 \times 60$ .
- ◆ investigate methods for solving problems using mathematics in everyday situations.
- ◆ continue to explore 3-dimensional objects and their properties, uses, and relationships.
- ◆ collect, organize, and interpret numerical data.
- ◆ work with number lines, coordinates, times, latitude/longitude, and dates.
- ◆ 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!**