

STUDY LINK
12•7

Family Letter



Congratulations!

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

This Family Letter is a resource to use throughout your child's 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 *Fifth Grade Everyday Mathematics*. Enjoy the 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 fourth 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 *Fifth Grade Everyday Mathematics*.

1. Have your child practice any multiplication and division facts that he or she has not yet mastered. Include some quick drills.
2. Provide items for your child to measure. Have your child use personal references, as well as U.S. customary and metric measuring tools.
3. Use newspapers and magazines as sources of numbers, graphs, and tables that your child may read and discuss.
4. Have your child practice multidigit multiplication and division using the algorithms that he or she is most comfortable with.
5. Ask your child to look at advertisements and find the sale prices of items using the original prices and rates of discount or find rates of discount using original prices and sale prices. Have your child use a calculator and calculate unit prices to determine best or better buys.
6. Continue the World Tour by reading about other countries.

Building Skills through Games

The following section lists rules for games that can be played at home. You will need a deck of number cards, which can be made from index cards or by modifying a regular deck of cards as follows:

A regular deck of playing cards includes 54 cards (52 regular cards plus 2 jokers).

Use a permanent marker to mark some of the cards:

- ◆ Mark each of the four aces with the number 1.
- ◆ Mark each of the four queens with the number 0.
- ◆ Mark the four jacks and four kings with the numbers 11 through 18.
- ◆ Mark the two jokers with the numbers 19 and 20.

Beat the Calculator

Materials number cards 1–10 (4 of each); calculator

Players 3

Directions

1. One player is the “Caller,” one is the “Calculator,” and one is the “Brain.”
2. Shuffle the deck of cards and place it facedown.
3. The Caller draws two cards from the number deck and asks for their product.
4. The Calculator solves the problem with a calculator. The Brain solves it without a calculator. The Caller decides who got the answer first.
5. The Caller continues to draw two cards at a time from the number deck and asks for their product.
6. Players trade roles every 10 turns or so.

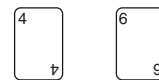
Example: The Caller draws a 10 and 7 and calls out “10 times 7.”
The Brain and the Calculator solve the problem.



The Caller decides who got the answer first.

Variation 1: To practice extended multiplication facts, have the Caller draw two cards from the number deck and attach a 0 to either one of the factors or to both factors before asking for the product.

Example: If the Caller turns over a 4 and a 6, he or she may make up any one of the following problems:



$4 * 60$

$40 * 6$

$40 * 60$

Variation 2: Use a full set of number cards: 4 each of the numbers 1–10, and 1 each of the numbers 11–20.

Building Skills through Games

Name That Number

Materials 1 complete deck of number cards

Players 2 or 3

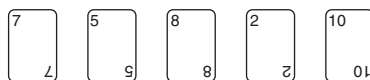
Object of the game To collect the most cards

Directions

1. Shuffle the cards and deal five cards to each player. Place the remaining cards number-side down. Turn over the top card and place it beside the deck. This is the **target number** for the round.
2. Players try to match the target number by adding, subtracting, multiplying, or dividing the numbers on as many of their cards as possible. A card may be used only once.
3. Players write their solutions on a sheet of paper or a slate. When players have written their best solutions:
 - ◆ They set aside the cards they used to name the target number.
 - ◆ Replace them by drawing new cards from the top of the deck.
 - ◆ Put the old target number on the bottom of the deck.
 - ◆ Turn over a new target number, and play another hand.
4. Play continues until there are not enough cards left to replace all of the players' cards. The player who sets aside more cards wins the game.

Example: Target number: 16

A player's cards:



Some possible solutions:

$$10 + 8 - 2 = 16 \text{ (three cards used)}$$

$$7 * 2 + 10 - 8 = 16 \text{ (four cards used)}$$

$$8 / 2 + 10 + 7 - 5 = 16 \text{ (all five cards used)}$$

The player sets aside the cards used to make a solution and draws the same number of cards from the top of the deck.

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

The Greedy Triangle by Marilyn Burns

Measurement

The Magic School Bus Inside the Earth by Joanna Cole

The Hundred Penny Box by Sharon Bell Mathis

Numeration

Alexander, Who Used to be Rich Last Sunday by Judith Viorst

If You Made a Million by David M. Schwartz

Fraction Action by Loreen Leedy

How Much Is a Million? by David M. Schwartz

Operations

Anno’s Mysterious Multiplying Jar by Masaichiro Anno

The King’s Chessboard by David Birch

One Hundred Hungry Ants by Elinor J. Pinczes

A Remainder of One by Elinor J. Pinczes

Patterns, Functions, and Sequences

Eight Hands Round by Ann Whitford Paul

Visual Magic by David Thomas

Reference Frames

The Magic School Bus: Inside the Human Body by Joanna Cole

Pigs on a Blanket by Amy Axelrod

Looking Ahead: Fifth Grade Everyday Mathematics

Next year your child will . . .

- ◆ Develop skills with decimals and percents
- ◆ Continue to practice multiplication and division skills, including operations with decimals
- ◆ Investigate methods for solving problems using mathematics in everyday situations
- ◆ Work with number lines, times, dates, and rates
- ◆ Collect, organize, describe, and interpret numerical data
- ◆ Further explore the properties, relationships, and measurement of 2- and 3-dimensional objects
- ◆ Read, write, and use whole numbers, fractions, decimals, percents, negative numbers, and exponential notation
- ◆ Explore scientific notation

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