End-of-Year Family Letter

Home Link 8-14

NAME DATE TIME

Congratulations!

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

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 your vacation!

Do-Anytime Activities

Mathematics means more to everyone 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 to do together over the break. These activities will not only help to prevent your child from forgetting content, but they will also help prepare him or her for *Fifth Grade Everyday Mathematics*.

1. Practice multiplication and division facts to maintain fluency.
2. Convert measurements in real-world contexts. For example, at the grocery store ask, "How many quarts are in this gallon of milk?"
3. Have your child practice multidigit multiplication and division using the algorithms with which he or she is most comfortable.
4. Look at advertisements and compare sale prices to original prices. Use a calculator to find unit prices to determine possible savings.

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 write on the cards or a ballpoint pen to write on pieces of white adhesive labels 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 each of the four jacks and the four kings with one of the numbers from 11–18.
- Mark the two jokers with the numbers 19 and 20.

Name That Number

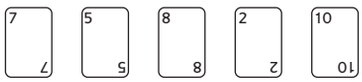
Materials 1 set of cards. See above for directions to make this set.

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 used cards 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:

$10 + 8 - 2 = 16$ (*three cards used*)

$7 * 2 + 10 - 8 = 16$ (*four cards used*)

$8 / 2 + 10 + 7 - 5 = 16$ (*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.

Top-It Games

Materials Number cards 1–9 (4 of each) as described above
1 calculator (optional)

Players 2 to 4

Skills Addition, Subtraction, and Multiplication

Object of the Game To collect the most cards

Addition Top-It
Directions

1. Shuffle the cards and place them number-side down on the table.
2. Each player takes eight cards, forms two 4-digit numbers, and finds the sum. Players should carefully consider how they form their numbers, because different arrangements lead to different sums. For example, 7,431 + 5,269 has a greater sum than 1,347 + 2,695. The player with the largest sum takes all the cards. In case of a tie, each player turns over eight more cards and calls out the sum. The player with the largest sum takes all the cards from both rounds.
3. Check answers, using a calculator if necessary.
4. The game ends when there are not enough cards left for each player to have another turn.
5. The player with the most cards wins.

Subtraction Top-It
Directions

1. Shuffle the cards and place the deck number-side down on the table.
2. Each player takes eight cards, forms two 4-digit numbers, and finds the difference. Players should carefully consider how they form their numbers, because different arrangements lead to greater differences. For example, 7,431 − 5,269 has a smaller difference than 7,431 − 2,695. The player with the largest difference takes all the cards. In case of a tie, each player turns over eight more cards and calls out the difference. The player with the largest difference takes all the cards from both rounds.
3. Check answers, using a calculator if necessary.
4. The game ends when there are not enough cards left for each player to have another turn.
5. The player with the most cards wins.

Multiplication Top-It
Directions

1. Shuffle the cards and place them number-side down on the table.
2. Each player turns over four cards, forms two 2-digit numbers, and finds the product. Players should carefully consider how they form their numbers, because different arrangements lead to different products. For example, 74 * 52 has a greater product than 47 * 25. The player with the largest product takes all the cards. In case of a tie, each player turns over four more cards and calls out the product. The player with the largest product takes all the cards from both rounds.
3. Check answers, using a calculator if necessary.
4. The game ends when there are not enough cards left for each player to have another turn.
5. The player with the most cards wins.

Vacation Reading with a Mathematical Twist

Books can contribute to students' learning by representing 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 and other mathematics-related books with your child.

Operations and Algebraic Thinking

A Remainder of One by Elinor J. Pinczes
17 Kings and 42 Elephants by Margaret Mahy
Anno's Magic Seeds by Mitsumasa Anno
Pattern by Henry Pluckrose
The Grapes of Math by Greg Tang

Numeration and Operations in Base-Ten

If the World Were a Village by David J. Smith
The Doorbell Rang by Pat Hutchins
The Man Who Counted: A Collection of Mathematical Adventures by Malba Tahan
The Grizzly Gazette by Stuart J. Murphy

Numeration and Operations: Fractions

Fraction Fun by David A. Adler
Working with Fractions by David Adler
Full House by Dayle Ann Dodds
Funny & Fabulous Fraction Stories by Dan Greenberg
Civil War Recipes: Adding and Subtracting Simple Fractions by Lynn George
Music Math: Exploring Different Interpretations of Fractions by Kathleen Collins
My Half Day by Doris Fisher and Dani Sneed
The Wishing Club by Donna Jo Napoli

Measurement and Data

How Tall, How Short, How Faraway by David A. Adler
Is a Blue Whale the Biggest Thing There Is? by Robert E. Wells
Math Curse by Jon Scieszka and Lane Smith
Counting on Frank by Rod Clement
Spaghetti and Meatballs for All! by Marilyn Burns

Geometry

The Greedy Triangle by Marilyn Burns
Grandfather Tang's Story by Ann Tompert
Sweet Clara and the Freedom Quilt by Deborah Hopkinson
Whale of a Tale by Barbara Pearl
Zachary Zormer, Shape Transformer by Joanne Reisberg

Looking Ahead: *Fifth Grade Everyday Mathematics*

Next year, your child will . . .

- Continue to explore and practice whole-number operations, including the use of exponents, and work with larger numbers.
- Expand skills with decimals and fractions, includeing using all four operations.
- Investigate methods for solving problems using mathematics in everyday situations.
  - Graph points on coordinate planes to solve real-world mathematical problems
  - Work with number lines, times, dates, and rates
  - Collect, organize, describe, and interpret numerical data
- Analyze patterns and relationships.
- Further explore the properties, relationships, and measurement of 2-dimensional objects and begin to work with 3-dimensional objects.
- Understand the concepts of volume.

Again, thank you for all of your support this year. Have fun increasing your own understanding of mathematics while continuing your child's mathematical learning!