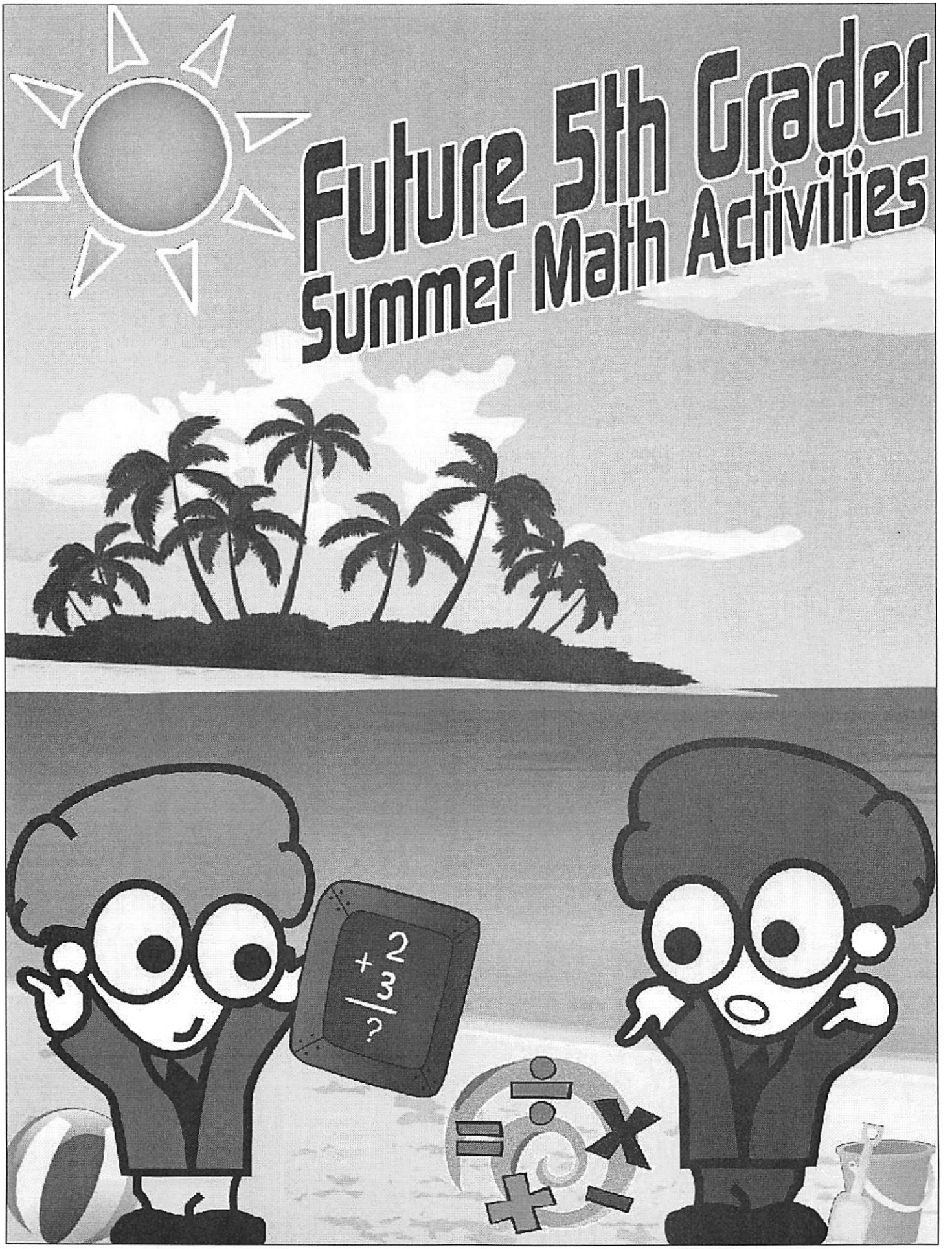
Future 5th Grader
Summer Math Activities
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**OFFICE OF CURRICULUM AND INSTRUCTION**
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Dear Parents/Guardians:

The Ewing Board of Education has endorsed the use of a Summer Mathematics Packet in order to keep your child's math skills honed and current through the summer break.

The attached packet includes two "bingo boards" of activities—one for July and the other for August. This formatting will allow for families to choose activities of interest to them. The goal is to complete four activities in a row, or the four corner boxes, on each board.

Each possible combination of four boxes on a board includes one of the following:

- **Family Activity:** These family activities are designed to take advantage of typical everyday activities and focus on the math involved. Suggested discussion questions are included in the description of each family activity for your convenience. Many of these activities are the same or nearly the same across the grade levels so that families with children of different ages may work together. For example, during a trip to the grocery store a younger child may work on keeping count of items in the cart while an older child tracks an estimate of the final cost of the items.
- **Story Problem:** These story problems focus on the major content that the students have worked on during the school year. Children may use numbers or drawings to keep track of their thinking as they work and should be encouraged to use strategies familiar to them. Only the final answer needs to be recorded in the bingo board box. If your child wishes to include his/her work, attach it to the board when it is returned to school.
- **Game to Practice Facts and Computational Skills:** The simple game directions are written in the bingo board boxes. Game play requires a deck of cards and dice. If you are unable to obtain these materials, please contact me via email or phone.
- **Free Choice Game:** Students may select from a variety of options to complete this task. Options include playing identified math games online or using the attached game boards. Options are listed on the back of this letter.

Please work with your child to complete four tasks on the July board and four tasks on the August board. Completed tasks should be circled. I suggest that your child do one math task a week, however, feel free to have your child work on additional tasks, marking the extra activities with a star. Sign both boards, and have your child return the bingo board page to his/her teacher on the first day of school.

Thank you for continuing to positively communicate that our students can be strong math thinkers by asking them questions, having them explain their thinking and reasoning, and working together to notice new things about mathematics. Your encouragement and support of your children's efforts in mathematics are vital in helping your children develop a love of math. If you have any questions regarding problem solving strategies your child is using, please feel free to contact me.

Don Wahlers
District Supervisor for Curriculum & Instruction
STEM, K-12

Rising Fifth Graders' Summer Math Bingo

# FREE CHOICE GAMES

Choose from these options to complete the free choice games spots on the bingo boards. Once you've played the game, record the name of the game on the bingo board. Good luck!

**Free Choice Online Games**— Go to www.mathplayground.com , scroll down, and click on Grade 4. Select from these games:

- Division Derby
- Grand Prix Multiplication
- Missing Digits Multiplication
- Demolition Derby
- Galaxy Pals

**Free Choice Paper Games**—game boards on the next page

Thousands Capture Tic-Tac-Toe

Materials: tic-tac-toe board (attached), pennies and dimes, deck of cards (A = 1, no 10, J, Q, K)

Decide who will be pennies, who will be dimes, and who will go first. To take a turn, flip 4 cards, arrange them in any order, and round the number to the nearest thousand. Capture that thousand number by covering it with your coin. Take turns with another player. If you can't capture a number, you lose your turn. The first player to capture three in a row horizontally, vertically, or diagonally wins.

Triple Digit

Materials: game board (attached), one die, a pencil

Directions: Take turns rolling the die. For each turn, decide if you will place this digit in the ones, tens, or hundreds column. For example, a roll of 4 could have a value of 4, 40, or 400. Keep track of your total along the way to see how close you are to 1,000. (It is okay to go over 1,000 but the player closest to 1,000 wins.) Pay close attention to your running total; you MUST use all seven turns!

Fraction Capture

Materials: Fraction Capture game board (attached), two dice, two different color crayons

Directions: The object of the game is to capture any 4 squares by coloring them completely. Player A rolls the dice and makes a fraction with the numbers. The smaller number is the numerator. Player A colors the portion of one or more of the game board squares to show the fraction. Equivalent fractions may be claimed. (For example, Player A rolled a 6 and a 3, makes the fraction three-sixths, and colors in either 3 of the 1/6 sections on any of the sixths squares or colors in one of the 1/2 sections on a halves square because one-half is equivalent to three-sixths.) Player B takes a turn, using his/her color. Blocking is allowed and encouraged. Play ends when a player has captured 4 squares or there are no more moves. The squares can be anywhere on the board.

# Thousands Capture Tic-Tac-Toe

| | | |
|---|---|---|
| 1,000 | 2,000 | 3,000 |
| 4,000 | 5,000 | 6,000 |
| 7,000 | 8,000 | 9,000 |

---

# Triple Digit

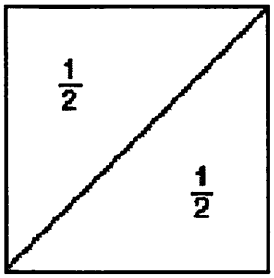
Player A:

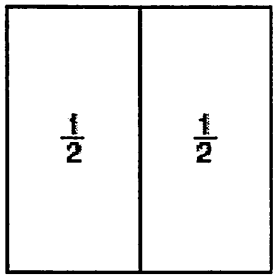
| Turn | Hundreds | Tens | Ones |
|---|---|---|---|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| Total: | | | |

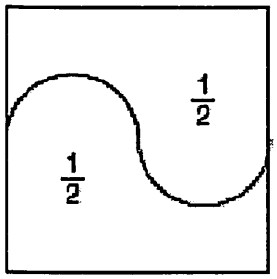
Player B:

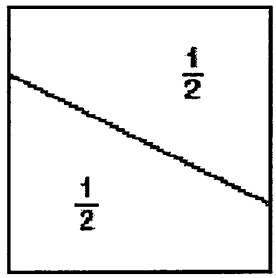
| Turn | Hundreds | Tens | Ones |
|---|---|---|---|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| Total: | | | |

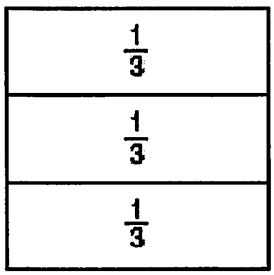
# Fraction Capture

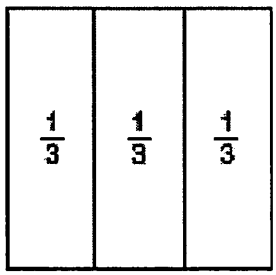


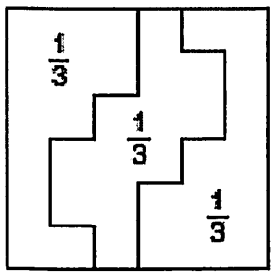



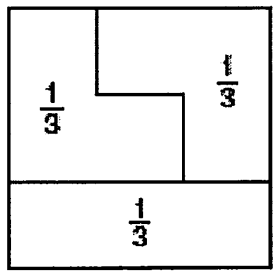



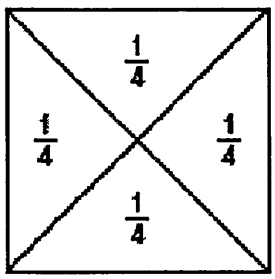



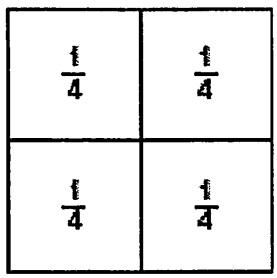



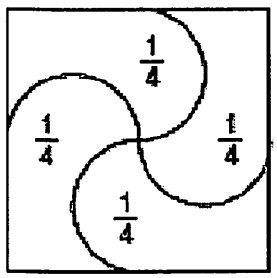



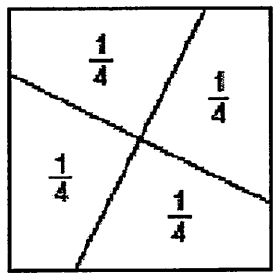



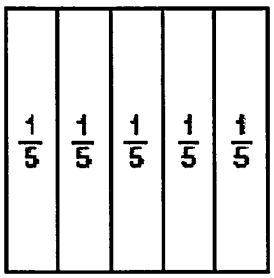



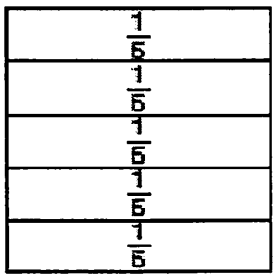



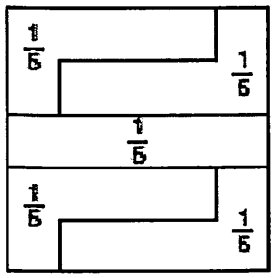



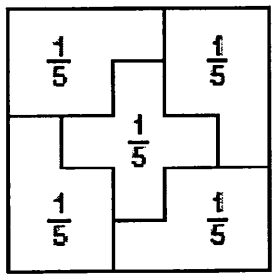



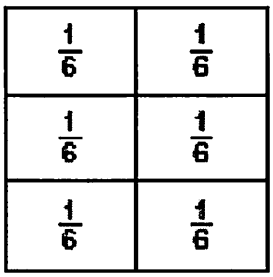



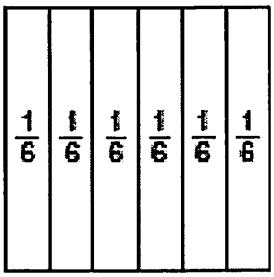



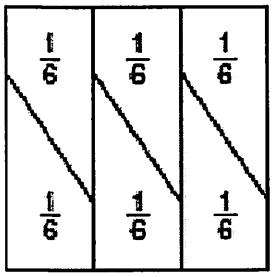



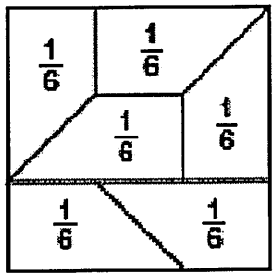



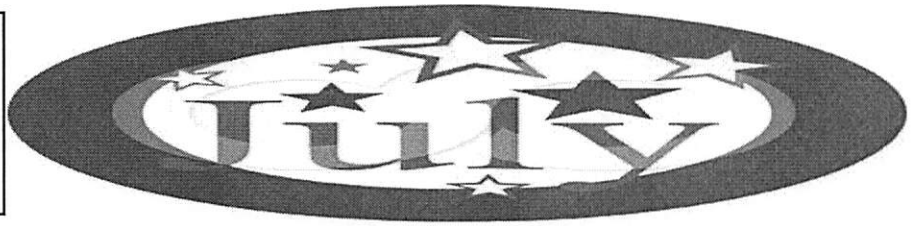



**Rising Fifth Graders' Summer Math Bingo**

☺ *Select and complete four activities in a row (or the four corners) on your bingo board for the month of July. Circle each box as you complete it. Draw a star on any extra activities you complete just for fun.* ☺

Student Name:




Parent/Guardian Signature:

| | | | |
|---|---|---|---|
| **Family Activity: Finding Symmetry**<br>Work together to find symmetry in the world around you. What items can you find at home that have a line of symmetry? In the neighborhood? At places you visit? In nature? In art? Make your own symmetrical art project by folding a piece of paper in half and cutting out a shape, keeping the fold intact. | **Snap! Game:***<br>Deal out all cards to players. Each player keeps their own stack face down. Players declare a "funky factor" which is the factor that will be used for the entire game. Players then yell Snap!, turn over one card, and multiply their card by the funky factor. The player who correctly identifies their product first wins both cards. The player with the most cards wins. | **Free Choice Game:**<br>Select and play a game from the list. Which game did you play?<br>_____ | **Cupcake Problem:**<br>At Lardo Bakery, they baked 356 cupcakes. Each box they sold held 6 cupcakes. How many boxes of 6 cupcakes could they sell?<br>_____ |
| **Free Choice Game:**<br>Select and play a game from the list. Which game did you play?<br>_____ | **Green's Gardens Problem:**<br>Mr. Green's tomato garden measured 15 ft. by 9 ft. Mrs. Green's vegetable garden measured 12 ft. by 12. ft. Whose garden covered more area? How much more?<br>_____ | **Family Activity: Plan a Day Trip**<br>Pretend you are planning a day trip. Where would you go? What would you do? Do some research. How far away is it in miles? How long would it take to get there? How much would the activity, travel, and food cost? Plan a schedule and budget for your day trip. | **Half Past Game:***<br>Player A pulls 8 playing cards from a deck. Using one card as a numerator and one for a denominator, Player A makes four fractions. Player A earns a point for each fraction formed that is greater than one-half. No fraction greater than 1 is allowed. Player B draws 8 new cards and takes a turn. Play 3 rounds. High score wins. |
| **Rollercoaster Problem:**<br>Eighty-six students went on the class trip to Great Adventure. Each rollercoaster car held four students. How many rollercoaster cars would be needed for all of the students to ride at the same time?<br>_____ | **Free Choice Game:**<br>Select and play a game from the list. Which game did you play?<br>_____ | **24 Game:***<br>Flip over four cards for all players to use. Each player tries to achieve a result of 24. The players may add, subtract, multiply, or divide the digits appearing on the cards in any combination, but all four cards must be used. The player who achieves 24 wins the point. If no one gets 24, the player closest to 24 wins the point. The first player with three points wins! | **Family Activity: Bulk Shopping**<br>Many times it is cheaper to buy items in bulk. Look through the sale flyer for the grocery store or look at prices when you are shopping. Pick an item like paper towels. How much does a single roll cost? 12 single rolls? A 12-pack? What is the best deal? |
| **Big Difference Game:***<br>Each player sets up a recording sheet:<br>1,000 Player A flips one<br>—____ card, decides where<br>_____ to place that digit on the blanks, and records the number. Once a number has been placed it cannot be moved. Player B takes a turn. After all the blank spots are filled, players find their differences. The larger difference wins a point; 3 points to win. | **Family Activity: How do you use math?**<br>Talk with the adults in your family. Discuss: How do you use math in your everyday life? (at home, at work, shopping, budgeting, etc.) What math tools do you use? | **Stadium Seats Problem:**<br>At the baseball stadium, there were 27 rows of seats with 48 seats in each row. Three hundred forty-seven of the seats were empty. How many spectators were in the seats?<br>_____ | **Free Choice Game:**<br>Select and play a game from the list. Which game did you play?<br>_____ |

*For these card games, use an Ace as 1 and omit the 10s and face cards (Jacks, Queens, Kings).

**Rising Fifth Graders' Summer Math Bingo**

☺ *Select and complete four activities in a row (or the four corners) on your bingo board for the month of August. Circle each box as you complete it. Draw a star on any extra activities you complete just for fun.* ☺

| Student Name: |  | Parent/Guardian Signature: |
|---|---|---|



| | | | |
|---|---|---|---|
| **Family Activity: Grocery Store Math**<br>Take a trip to the grocery store. Work together to round the cost of each item and keep track of the total cost along the way. Compare your estimate to the final cost. | **Splash! Game:***<br>Player A rolls three dice and multiplies the three digits. Player A then adds the three digits together and adds the sum to the product. The result is Player A's score for that round. Player B then takes a turn. The player with the high score after 5 rounds wins. | **Free Choice Game:**<br>Select and play a game from the list. Which game did you play?<br>_____ | **Busy Campers Problem:**<br>There were 24 students in Ms. Koz's camp group. One-third went to the lake. One-fourth went on a hike. The rest went to arts & crafts. How many campers went to arts & crafts?<br>_____ |
| **Free Choice Game:**<br>Select and play a game from the list. Which game did you play?<br>_____ | **Chocolates Problem:**<br>If Carl ate one-eighth of his bag of 32 chocolates and Tom ate one-seventh of his bag of 49 chocolates, who ate more chocolates? How many more?<br>_____ | **Family Activity: Cooking Together**<br>Work together to prepare a favorite recipe. Have the child read the recipe and measure out the ingredients. Discuss: What quantity of each ingredient would be needed to double the recipe? To triple it? | **Roll & Add Game:***<br>Each player sets up a recording sheet:<br>_____ Player A rolls one<br>+ _____ die, decides where<br>_____ to place that digit<br>in the addends, and records the number. Once a number has been placed it cannot be moved. Player B takes a turn. After all the spots in the addends are filled, players find their sums. The larger sum wins a point. First to 3 points wins. |
| **Arcade Points Problem:**<br>Zaire and Josh went to the arcade. Zaire earned 4,287 points and Josh earned 3,695 points. If they combined their points, how many more do they need to earn an iPod that costs 10,000 points?<br>_____ | **Free Choice Game:**<br>Select and play a game from the list. Which game did you play?<br>_____ | **Roll & Multiply Game:***<br>Each player sets up a recording sheet: __ __ x __ = ____ . Players take turns rolling one die, placing the digit in one of the factor blanks. Once a digit is placed it cannot be moved. After the blanks are filled, each player multiplies to find the product. The product is the score. The player with the highest score after 3 rounds wins. | **Family Activity: Board Game**<br>Play a board game together, such as Monopoly, Yahtzee, Parcheesi, Trouble, Pay Day, Sorry!, Checkers, etc. |
| **Don't Bust 50 Game:***<br>Goal: closest to 50 without going over. Player A rolls 2 dice and multiplies the digits. Player A continues to roll the 2 dice, multiplying, and then adding the products along the way. Player A may bank at any time. If Player A busts 50, the turn is over. When Player A banks or busts 50, it is Player B's turn. The player closest to 50 without busting wins. | **Family Activity: Number Hunt**<br>Take a walk around the house, the neighborhood, or a place you are visiting. Discuss: What fractions or decimals do you see? How are the fractions or decimals being used? What is the smallest fraction or decimal you could find? | **Free Throws Problem:**<br>Jay made six more free throws than Luke. Luke made 4 times as many free throws as Max. Max made six free throws. How many free throws did Jay make?<br>_____ | **Free Choice Game:**<br>Select and play a game from the list. Which game did you play?<br>_____ |

*Use regular dice for these games. If you don't have dice, you can use cards Ace (1) through 6.