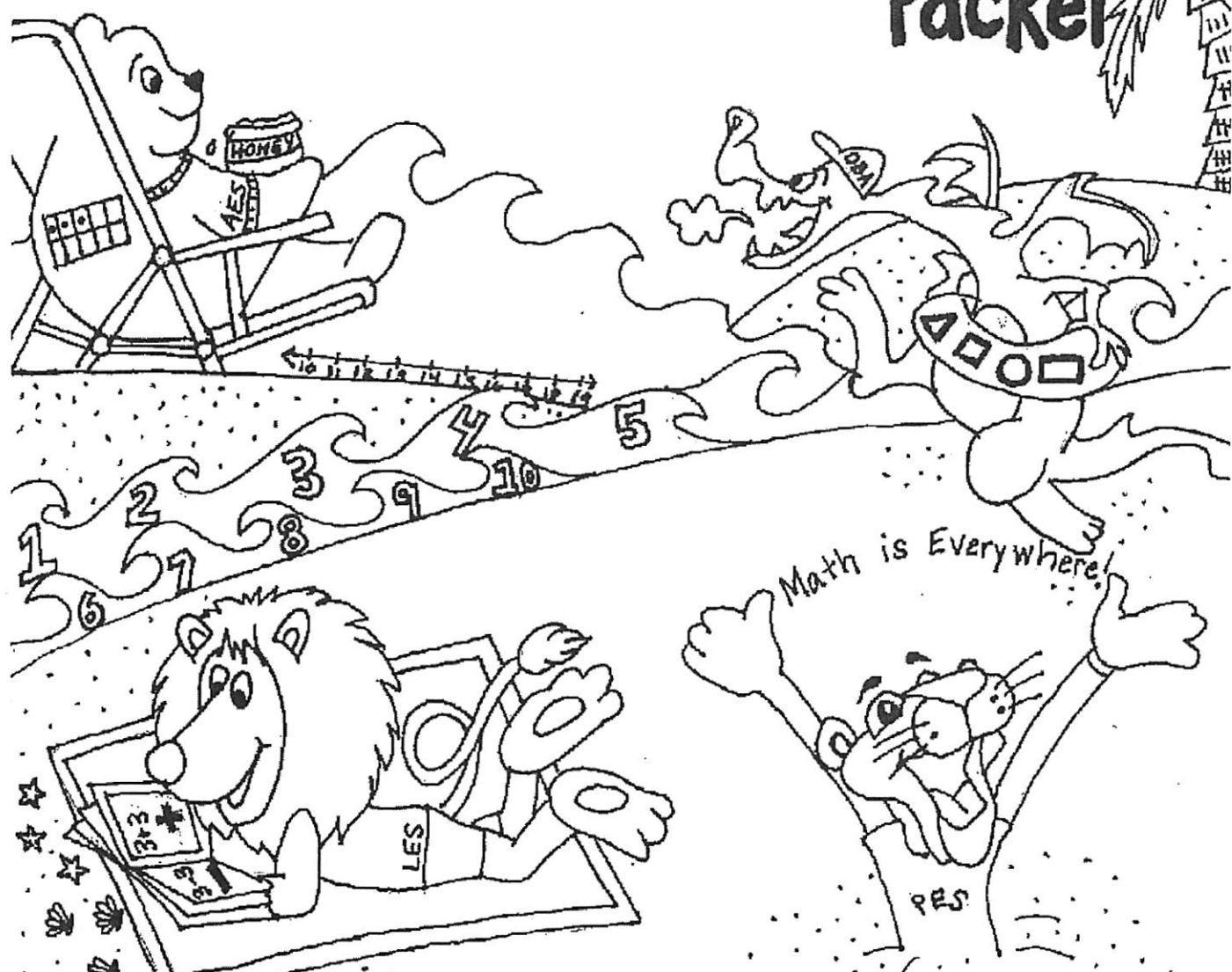


EWING PUBLIC
SCHOOLS

SUMMER Maths

Rising
4th Grade

Packet



Don Wahlers, District Supervisor for Curriculum & Instruction
S.T.E.M. K-12
dwahlers@ewingboe.org

Phone 609-538-9800 Ext. 5155 Fax 609-882-8172
www.ewing.k12.nj.us

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 Fourth 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.abcy.com and click on Grade 4. Select the Numbers tab or scroll down to find these games:

🎲 Brainie

🎲 Clear It! Multiplication

🎲 Fraction Fling

🎲 Math Facts Basketball

🎲 Multiplication Mine

🎲 Mystic Numbers

🎲 Rounding Numbers (Level 1)

Free Choice Paper Games—game boards on the next page

Multiple Bingo

Materials: multiple bingo board (attached), pennies and dimes, deck of cards (A = 1, no J, Q, K)

Directions: Player A places a penny anywhere on the board and then flips a card. If the number under the penny is a multiple of the number on the card, the penny may remain on the number. If it is not, the penny is removed and it is Player B's turn. Player B repeats this process using a dime as his or her marker. Take turns until one player has 3 counters in a row horizontally, vertically, or diagonally.

Multiplication Squares

Materials: game board (attached), two dice, a pencil

Directions: Player A rolls both dice, multiplies the digits, finds the product on the game board, and draws ONE line along the side of a square that contains that product. Player B takes a turn. Players continue alternating turns, striving to draw the line that will complete a square. When a player completes a square he/she puts his/her initials inside that square and takes a bonus turn. If a player's roll results in a product that is no longer available, he/she loses that turn. The game ends when all squares have been completed, or at a set end time. The player who claimed the most squares wins.

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.

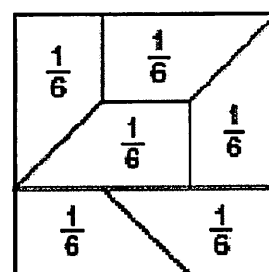
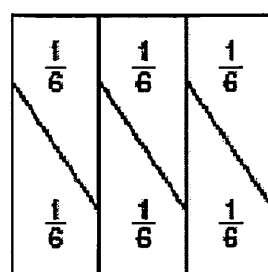
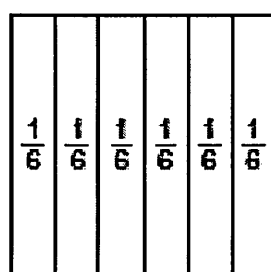
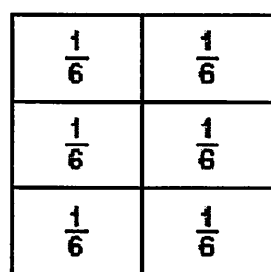
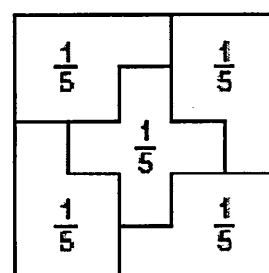
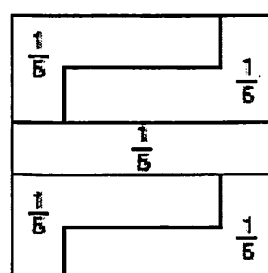
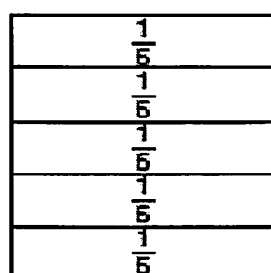
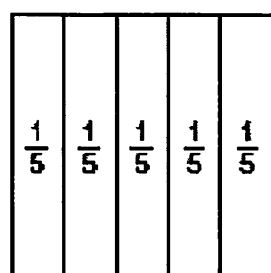
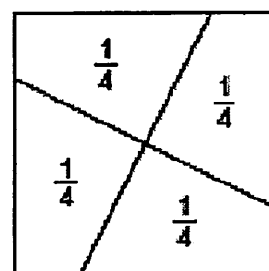
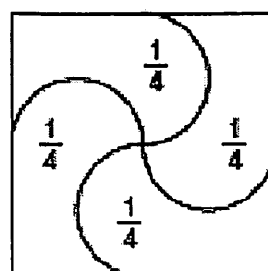
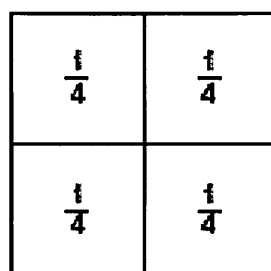
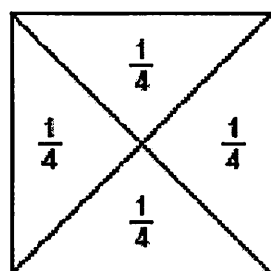
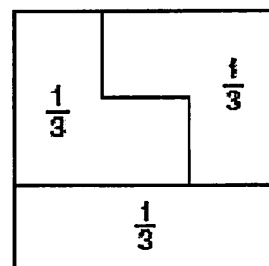
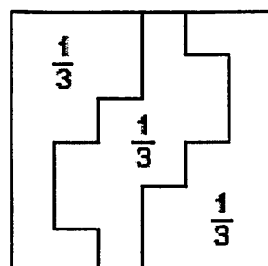
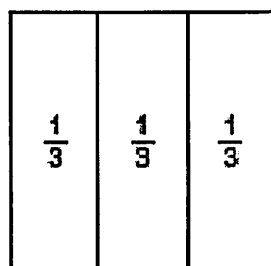
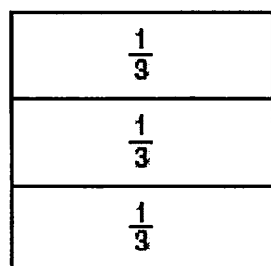
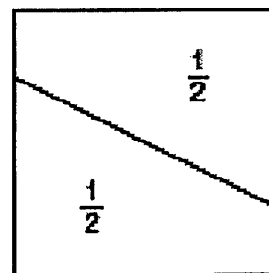
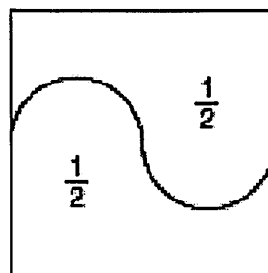
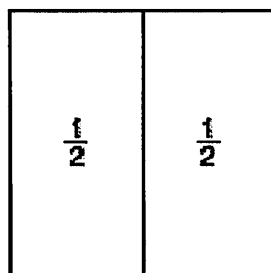
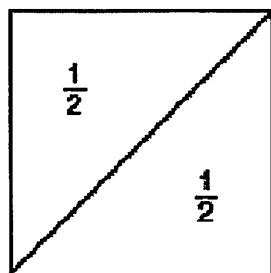
Multiple Bingo

63	30	16	42
24	45	36	56
54	20	32	48
35	18	72	12

Multiplication Squares

10	15	6	3	30	8
12	25	4	24	16	18
4	12	36	6	12	6
20	2	10	9	4	12
12	5	8	3	1	20
30	15	18	24	6	2

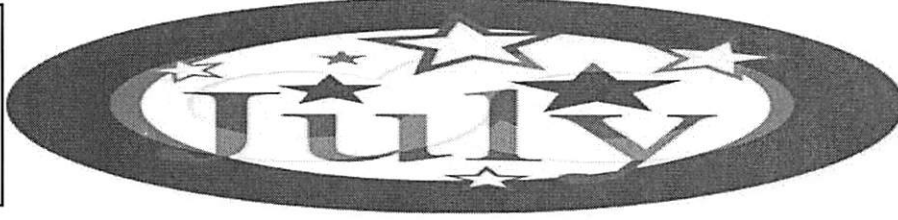
Fraction Capture



Rising Fourth 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:

<p>Family Activity: Count Around the Family Pick a number to count by from 2 to 10. Take turns counting by that number around the family. Keep going until someone reaches 100 or a number larger than 100. The person to break 100 wins! Discuss: Does someone always land on 100 exactly? Are the numbers always odd or even? What patterns do you notice? Try it with another #.</p>	<p>Over/Under 20 Game:* Split a deck of cards between 2 players. One player is "under 20" and the other is "over 20". Each player flips one card. Multiply the cards. Both cards go to the player whose value it matches. (Ex: 7 and 2 are flipped, goes to "under 20" player because $7 \times 2 = 14$.) The player with most cards wins!</p>	<p>Free Choice Game: Select and play a game from the list. Which game did you play? _____</p>	<p>Stadium Food Problem: At the stadium, hot dogs cost \$4, nachos cost \$6, and sodas cost \$3. The Ramirez family bought one order of nachos, three hot dogs, and 5 sodas. Mr. Ramirez paid with two \$20 bills. How much change will he get back from the vendor? _____</p>
<p>Free Choice Game: Select and play a game from the list. Which game did you play? _____</p>	<p>Boardwalk Prize Problem: Emily earned 412 tickets at the boardwalk. Her brother earned 379 tickets. They want to pool their tickets together to win a DVD for 725 tickets and the stuffed bear for 175 tickets. How many more tickets do they need? _____</p>	<p>Family Activity: Plan a BBQ Look through the sale flyer from the grocery store. Plan a BBQ for the family. Discuss: How much food would we need? How many packages? What would it cost? What other items might we need, like paper plates or napkins? Are there any coupons we could use? Are the items cheaper elsewhere?</p>	<p>Mind Reader Game:* To play, you will need one dealer and two players. The dealer gives each player a card face down, and then the players hold the cards to their foreheads so that the other player can see it but they can't see their own card. The dealer calls out the product. The player who names their card first wins the round and collects both cards. The player with the most cards wins!</p>
<p>Family Reunion Problem: The Johnson kids were going to visit their grandma for a family reunion. It takes 4 hours and 45 minutes to drive to Grandma's house. The family stopped for lunch, which took 45 minutes. If they left at 8:30 AM, what time did they get to Grandma's? _____</p>	<p>Free Choice Game: Select and play a game from the list. Which game did you play? _____</p>	<p>Hundreds Capture Game:* Write the hundreds numbers 100 to 900 on a slip of paper. Flip 3 cards, put them in any order, and round the number to the nearest hundred. Capture that hundred number by circling it in your color. Take turns with another player. If you can't capture a number, you lose your turn. When all numbers have been captured, the player with the most numbers wins.</p>	<p>Family Activity: Weather Reporters Keep a record of the weather for 10 consecutive days. Discuss: What fraction of the days were sunny? Rainy? Windy? What was the hottest day? The coolest? What was the difference in temperature between the hottest and coolest days?</p>
<p>Last Out Game:* Players each write the numbers 1 through 10 on a piece of paper. Each player flips two playing cards and adds, subtracts, multiplies, or divides the digits and crosses off the resulting answer on his/her piece of paper. Players take turns. If a player cannot cross off a number on his turn, he is out. The last player out wins.</p>	<p>Family Activity: How do you use math? 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?</p>	<p>Beach Blanket Problem: Frankie put a 5 ft. by 6 ft. blanket down on the beach. Annette put down two towels side by side that were each 3 ft. by 6 ft. Who took up more room on the sand? _____</p>	<p>Free Choice Game: Select and play a game from the list. Which game did you play? _____</p>

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

Rising Fourth 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:

goodbye July. hello
AUGUST

Parent/Guardian
Signature:

<p>Family Activity: Grocery Store Math</p> <p>Take a trip to the grocery store together. 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.</p>	<p>Race to 500 Game:*</p> <p>Player A rolls two dice, multiplies the digits, and records the product on a piece of paper. Player B takes a turn. Players continue taking turns, adding up their products along the way. The player to reach 500 first wins.</p>	<p>Free Choice Game:</p> <p>Select and play a game from the list. Which game did you play?</p> <p>_____</p>	<p>Art Project Problem:</p> <p>Trina and Mia are making an art project at camp. Trina's picture is 8 in. by 6 in. and Mia's is 4 in. by 9 in. Each needs to put yarn all the way around their picture to make a frame. Who needs more yarn and how much more does she need?</p> <p>_____</p>
<p>Free Choice Game:</p> <p>Select and play a game from the list. Which game did you play?</p> <p>_____</p>	<p>Bike Riders Problem:</p> <p>Lee, Amy, and Max rode bikes around the campground. Lee rode one-half of a mile. Amy rode one-third of a mile. Max rode two-fourths of a mile. Which two kids rode the same distance?</p> <p>_____</p>	<p>Family Activity: Cooking Together</p> <p>Work together to prepare a favorite recipe. Have the child read the recipe and measure out the ingredients.</p>	<p>Roll & Add Game:*</p> <p>Each player sets up a recording sheet: ____ + ____ = ____.</p> <p>Player A rolls one die, decides where to place that digit in the addends, and records the number. Once a number has been placed it cannot be moved. Player B then takes a turn. After all the spots in the addends are filled, players find their sums. The player with the larger sum wins.</p>
<p>Water Ice Problem:</p> <p>Rosie's Water Ice delivered a tub of cherry water ice to the ball field. The tub can make 72 servings. Five softball teams with 9 players each already ordered their water ice. How many more teams of 9 can get water ice?</p> <p>_____</p>	<p>Free Choice Game:</p> <p>Select and play a game from the list. Which game did you play?</p> <p>_____</p>	<p>Bulls Eye Game:*</p> <p>Each player predicts the sum of ten rolls of one die. Roll ten times and find the sum. Each player finds the difference between his/her prediction and the sum of the rolls. The difference is the player's score; the lowest score wins.</p>	<p>Family Activity: Board Game</p> <p>Play a board game together, such as Monopoly, Yahtzee, Parcheesi, Trouble, Pay Day, Sorry!, Checkers, etc.</p>

<p>Press Your Luck Game:*</p> <p>Player A rolls one die. He can continue rolling as long as he wants, finding the sum along the way. His turn continues until he either banks his points or rolls a six and loses all his points from that round. Player B takes a turn. The first player to reach 50 wins.</p>	<p>Family Activity: Number Hunt</p> <p>Take a walk around the house, the neighborhood, or a place you are visiting. Discuss: What is the very largest number you could find? How do you say it? How were the numbers used? Keep a record of the largest number you find! See if anyone can beat it.</p>	<p>Ice Pops Problem:</p> <p>Elsa is making ice pops as summer treats. Each tray was a four by four array of ice pop molds. She made one tray, and she gave each of her six friends two pops. How many ice pops did she have leftover?</p> <p>_____</p>	<p>Free Choice Game:</p> <p>Select and play a game from the list. Which game did you play?</p> <p>_____</p>
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*Use regular dice for these games. If you don't have dice, you can use cards Ace (1) through 6.